This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

**Usage guidelines**

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

**About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

**A propos de ce livre**

Ceci est une copie numérique d'un ouvrage conservé depuis des générations dans les rayonnages d'une bibliothèque avant d'être numérisé avec précaution par Google dans le cadre d'un projet visant à permettre aux internautes de découvrir l'ensemble du patrimoine littéraire mondial en ligne.

Ce livre étant relativement ancien, il n'est plus protégé par la loi sur les droits d'auteur et appartient à présent au domaine public. L'expression "appartenir au domaine public" signifie que le livre en question n'a jamais été soumis aux droits d'auteur ou que ses droits légaux sont arrivés à expiration. Les conditions requises pour qu'un livre tombe dans le domaine public peuvent varier d'un pays à l'autre. Les livres libres de droit sont autant de liens avec le passé. Ils sont les témoins de la richesse de notre histoire, de notre patrimoine culturel et de la connaissance humaine et sont trop souvent difficilement accessibles au public.

Les notes de bas de page et autres annotations en marge du texte présentes dans le volume original sont reprises dans ce fichier, comme un souvenir du long chemin parcouru par l'ouvrage depuis la maison d'édition en passant par la bibliothèque pour finalement se retrouver entre vos mains.

**Consignes d'utilisation**

Google est fier de travailler en partenariat avec des bibliothèques à la numérisation des ouvrages appartenant au domaine public et de les rendre ainsi accessibles à tous. Ces livres sont en effet la propriété de tous et de toutes et nous sommes tout simplement les gardiens de ce patrimoine. Il s'agit toutefois d'un projet coûteux. Par conséquent et en vue de poursuivre la diffusion de ces ressources inépuisables, nous avons pris les dispositions nécessaires afin de prévenir les éventuels abus auxquels pourraient se livrer des sites marchands tiers, notamment en instaurant des contraintes techniques relatives aux requêtes automatisées.

Nous vous demandons également de:

+ *Ne pas utiliser les fichiers à des fins commerciales* Nous avons conçu le programme Google Recherche de Livres à l'usage des particuliers. Nous vous demandons donc d'utiliser uniquement ces fichiers à des fins personnelles. Ils ne sauraient en effet être employés dans un quelconque but commercial.

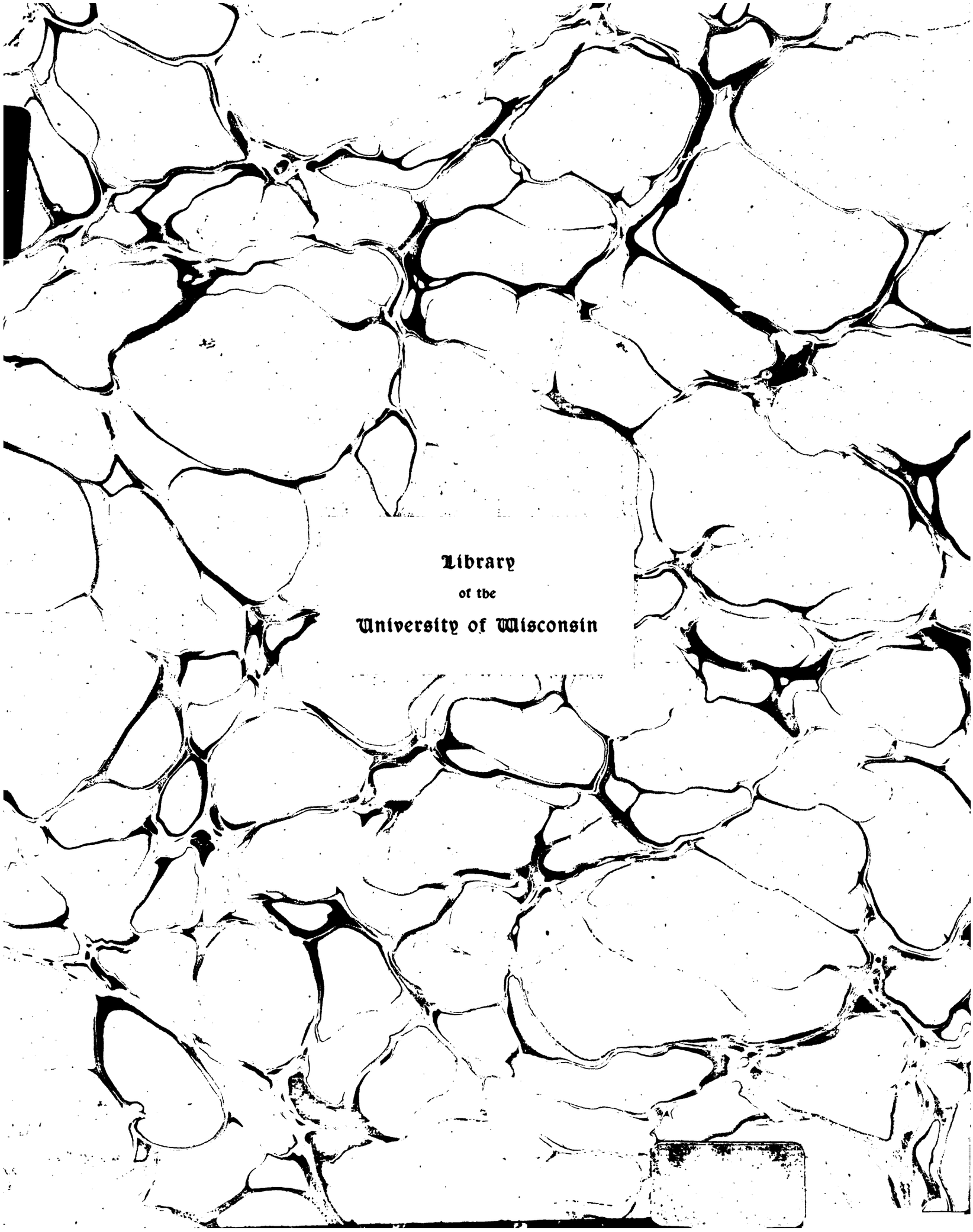
+ *Ne pas procéder à des requêtes automatisées* N'envoyez aucune requête automatisée quelle qu'elle soit au système Google. Si vous effectuez des recherches concernant les logiciels de traduction, la reconnaissance optique de caractères ou tout autre domaine nécessitant de disposer d'importantes quantités de texte, n'hésitez pas à nous contacter. Nous encourageons pour la réalisation de ce type de travaux l'utilisation des ouvrages et documents appartenant au domaine public et serions heureux de vous être utile.

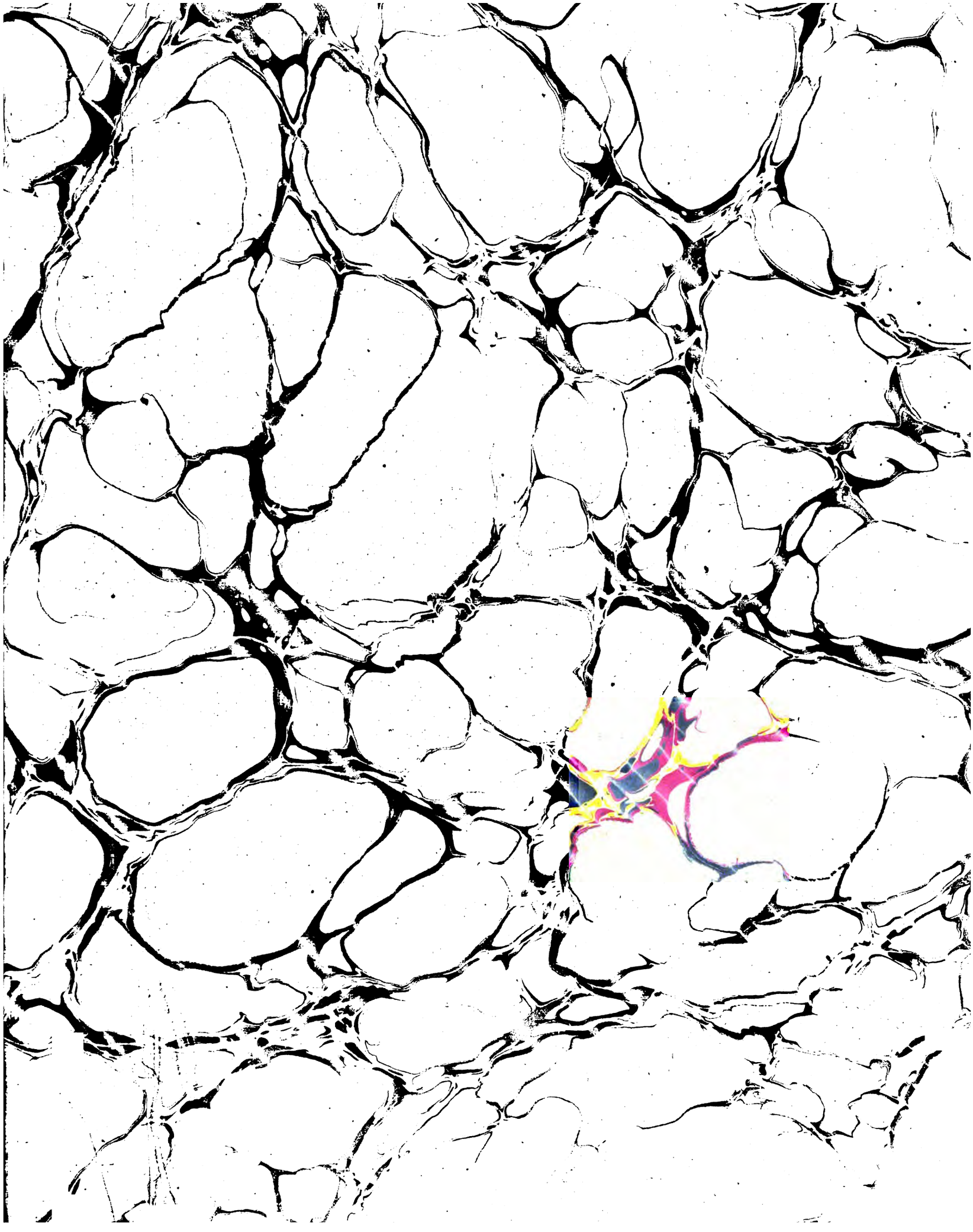
+ *Ne pas supprimer l'attribution* Le filigrane Google contenu dans chaque fichier est indispensable pour informer les internautes de notre projet et leur permettre d'accéder à davantage de documents par l'intermédiaire du Programme Google Recherche de Livres. Ne le supprimez en aucun cas.

+ *Rester dans la légalité* Quelle que soit l'utilisation que vous comptez faire des fichiers, n'oubliez pas qu'il est de votre responsabilité de veiller à respecter la loi. Si un ouvrage appartient au domaine public américain, n'en déduisez pas pour autant qu'il en va de même dans les autres pays. La durée légale des droits d'auteur d'un livre varie d'un pays à l'autre. Nous ne sommes donc pas en mesure de répertorier les ouvrages dont l'utilisation est autorisée et ceux dont elle ne l'est pas. Ne croyez pas que le simple fait d'afficher un livre sur Google Recherche de Livres signifie que celui-ci peut être utilisé de quelque façon que ce soit dans le monde entier. La condamnation à laquelle vous vous exposeriez en cas de violation des droits d'auteur peut être sévère.

**À propos du service Google Recherche de Livres**

En favorisant la recherche et l'accès à un nombre croissant de livres disponibles dans de nombreuses langues, dont le français, Google souhaite contribuer à promouvoir la diversité culturelle grâce à Google Recherche de Livres. En effet, le Programme Google Recherche de Livres permet aux internautes de découvrir le patrimoine littéraire mondial, tout en aidant les auteurs et les éditeurs à élargir leur public. Vous pouvez effectuer des recherches en ligne dans le texte intégral de cet ouvrage à l'adresse `http://books.google.com`


Library
of the
University of Wisconsin



# LA CONSTRUCTION

EN

# CIMENT ARMÉ

## APPLICATIONS GÉNÉRALES

## THÉORIES ET SYSTÈMES DIVERS

PAR MM.

**C. BERGER** ✪
ARCHITECTE

**V. GUILLERME** ✪
INGÉNIEUR CIVIL

**Préface de E. CANDLOT**

---

## PLANCHES

---

PARIS (VI^e^)
V^ve^ CH. DUNOD, ÉDITEUR
49, QUAI DES GRANDS-AUGUSTINS, 49
—
1902

7 1837
JUL 13 1903
SDKC
B45
Atlas

61.9225

# TABLE DES PLANCHES

## SYSTÈME COIGNET

**Pl. I.**— *Aqueduc d'Achères.* — Galerie libre, de 3 mètres de diamètre. — Galerie elliptique, de 5m,16 d'ouverture. — Bâches de Gennevilliers et d'Achères. — Terrasse de la bâche d'Achères.

**Pl. II.** — *Réservoirs.* — Réservoirs de 15 mètres cubes. — Réservoirs de 20 mètres cubes, avec tour en ciment armé.

**Pl. III.** — *Réservoirs.* — *Châteaux d'eau.* — Réservoir de 500 mètres cubes, pour l'arsenal de la Marine, à Rochefort. — Réservoir de 300 mètres cubes, au port de Lorient, chantier de Caudan.

**Pl. IV.** — *Réservoirs de l'usine de MM. Sautter-Harlé et Cie.*

**Pl. V.** — *Estacade sur la Seine.*

**Pl. VI.** — *Magasin de la Société « Aux Classes laborieuses », à Paris.* — Planchers. Toiture.

**Pl. VII.** — *Château d'eau de l'Exposition universelle de* 1900. — Plan d'ensemble. — Plan des vasques. — Ensemble de la grande niche. — Cloisons sous le plancher du déversoir. — Coupes. — Armature des voiles de l'arc doubleau.

**Pl. VIII.** — *Château d'eau de l'Exposition universelle de* 1900. — Mur de soutènement. — Contreforts. — Plancher des terrasses. — Plancher du déversoir. — Plan et détails des voiles sous les vasques.

**Pl. IX.** — *Château d'eau de l'Exposition universelle de* 1900. — Détails des arcs de la grande niche.

## SYSTÈME HENNEBIQUE

**Pl. X.** — *Pont de Châtellerault.* — Elévation. — Plans. — Coupes. — Contreforts des murs de tête.

**Pl. XI.** — *Travaux divers.* — Canalisation d'eau (percement du tunnel du Simplon). — Reconstruction du Pont-Neuf, sur l'Arve, à Reignier (Haute-Savoie). — Encorbellement des trottoirs, sur le chemin de fer de l'Ouest. — Mur de soutènement de la tranchée du quai de Billy.

## SYSTÈME MATRAI

**Pl. XII.** — *Planchers et hourdis.* — Type de planchers. — Attache des câbles. — Planchers d'essai au chemin de fer Métropolitain, à Paris. — Plancher d'essai, à Nice. — Plancher d'essai à Edimbourg.

**Pl. XIII.** — *Silos et planchers.* — Silos de l'usine de Chantemelle. — Plancher de la maison d'éducation de la Légion d'honneur, à Saint-Denis. — Plancher des usines A. Lumière, à Lyon.

**Pl. XIV.** — *Couverture de la tranchée du chemin de fer des Moulineaux.* — Plan d'ensemble. — Coupes et détails. — Poteaux. — Travées d'expérience.

**Pl. XV.** — *Chemin de fer métropolitain de Paris, station de Vincennes.* — Planchers des quais. — Planchers de la station.

**Pl. XVI.** — *Escaliers.* — *Cuve.* — Escaliers suspendus du Palais des Manufactures nationales, à l'Exposition universelle de 1900. — Types divers d'escaliers. — Cuve de réservoir.

**Pl. XVII.** — *Le Globe céleste, à l'Exposition universelle de* 1900. — Plans et coupes d'ensemble. — Planchers. — Escaliers.

## SYSTÈME BONNA

**Pl. XVIII.** — *Réservoirs.* — Réservoir pour la commune de Puiseux-les-Louvres. — Réservoir de 150 mètres cubes, à Rochefort. — Réservoir d'équilibre de Gennevilliers, sur la conduite d'Achères.

**Pl. XIX.** — *Usine de la Compagnie Centrale des Emeris.* — Elévation. — Plans et coupes d'ensemble. — Planchers. — Toiture. — Réservoir de 60 mètres cubes.

**Pl. XX.** — *Construction industrielle.* — *Cheminée.* — *Escalier.* — Usine de MM. Sautter, Harlé et Cie. — Plans et coupes d'ensemble. — Soutes à charbon. — Cheminée de la distillerie de Conflans-Sainte-Honorine. — Escalier de l'aqueduc de l'Emissaire général, à Chanteloup.

**Pl. XXI.** — *Pont et canalisation.* — Pont à Liancourt. — Canalisation pour le compte du Ministre de la Marine, à Brest.

**Pl. XXII.** — *Ponts.* — Pont sur le canal du Midi, à Toulouse. — Pont sur le Grand-Morin, à Esbly, près Meaux.

**Pl. XXIII.** — *Ponts.* — Pont en arc, de 21 mètres d'ouverture, sur le Gers, à Auch. — Passerelle pour le chemin de la Belle-Croix.

## SOCIÉTÉ J. ET A. PAVIN DE LAFARGE

**Pl. XXIV.** — *Travaux divers.* — Pont-aqueduc de l'Oued-Kléba, à Masséna (Algérie). — Canaux du Chéliff (Algérie). — Bâches du Hamiz (Algérie). — Egouts de Maison-Carrée (Algérie). — Cheminée du bassin de radoub, à Alger. — Maison éclusière de Jonage, sur le canal de dérivation des eaux du Rhône.

## M. PIKETTY

**Pl. XXV.** — *Réservoirs.* — Réservoirs de 30 mètres cubes. — Réservoirs de 31 mètres cubes, en briques armées. — Réservoir sur pylone. — Cuves à huile et cuves revêtues de verre.

**Pl. XXVI.** — *Fondations.* — *Planchers.* — Fondations sur mauvais terrain. — Plancher de cour, dans une construction industrielle.

**Pl. XXVII.** — *Ponts-Passerelles.* — Pont droit pour le passage supérieur d'un chemin vicinal. — Pont avec poutres de rives formant garde-corps. — Platelage en béton armé d'un pont métallique. — Renforcement en béton armé d'un ancien pont métallique. — Tablier en béton armé pour pont-route.

**Pl. XXVIII.** — *Ponts.* — Pont en arc creux. — Pont de 20 mètres de portée et 4m,50 de flèche, pour chariot de 8 tonnes. — Pont en bow-string.

**Pl. XXIX.** — *Travaux divers.* — Ponts à travées successives indépendantes, avec piles en briques armées. — Passerelle. — Appontement. — Bureau transportable.

**Pl. XXX.** — *Ponts et viaduc.* — Ponts exécutés sous la direction de M. Harel de La Noë, ingénieur en chef des Ponts et Chaussées. — Pont droit, à trois travées, pour passage supérieur d'un chemin vicinal. — Elargissement du pont de Pontlieue, sur l'Huisne, au Mans. — Viaduc étroit, en maçonnerie armée.

## SYSTÈME BOUSSIRON

**Pl. XXXI.** — *Réservoirs.* — Réservoirs accouplés, de 1.000 mètres cubes, pour la ville de la Madeleine. — Cuves à vin accouplées.

**Pl. XXXII.** — *Réservoir de 800 mètres cubes*, à Garches (service des eaux de Versailles).

**Pl. XXXIII.** — *Plancher.* — *Revêtement de digue.* — Ecole, rue des Brasseries, à Châlons-sur-Marne. — Plancher des classes. — Réservoir de la Mouche, près Langres. — Ecran protecteur des infiltrations.

**Pl. XXXIV.** — *Etablissement des Pupilles*, à la Villeneuve (Finistère). — Planchers. — Encorbellements.

**Pl. XXXV.** — *Couverture.* — *Planchers.* — Société des Huiles, de Colombes (Seine). — Toiture. — Restaurant des Congrès, à l'Exposition universelle de 1900. — Planchers.

**Pl. XXXVI.** — *Pont au droit de la rue Vallette*, à Perpignan. — Elévation. — Coupes d'ensemble. — Détails.

**Pl. XXXVII.** — *Pont au droit de la rue Vallette*, à Perpignan. — Détails. — Mur de soutènement. — Consoles.

## MM. GIROS ET LOUCHEUR

**Pl. XXXVIII.** — *Canalisations.* — *Plancher.* — Syphon pour la traversée de l'Oued-Isser (département d'Oran). — Conduite d'adduction d'eau, à Valence. — Conduites d'eau accouplées (usine du chemin de fer Métropolitain de Paris). — Type de plancher.

**Pl. XXXIX.** — *Réservoirs.* — Réservoir de 200 mètres cubes, à Sidi-Lhassen (Algérie). — Réservoir de 50 mètres cubes, au Mellinet (Algérie). — Réservoirs accouplés, pour exploitation industrielle.

**Pl. XL.** — *Soutes à charbon.* — *Escalier.* — Soutes à charbon pour l'usine électrique de Bercy (chemin de fer Métropolitain de Paris). — Escalier d'accès au collecteur Marceau (place de l'Etoile).

**Pl. XLI.** — *Le Triphasé.* — *Usine électrique d'Asnières.* — Soutes à charbon. — Réservoirs.

## SOCIÈTÉ DES TRAVAUX EN CIMENT DE LA PLAINE SAINT-DENIS

**Pl. XLII.** — *Réservoirs.* — Réservoir de 400 mètres cubes, sur murs en maçonnerie. — Réservoir pour la ville de Vimoutiers (Orne). — Cuves à vin, propriété de M. Fontan. — Citernes à vin, propriété de M. Félix Potin.

**Pl. XLIII.** — *Plancher.* — *Mur de soutènement.* — *Clôture.* — Couverture des arcades de la Bièvre. — Mur d'enceinte des aciéries d'Anvers.

## SOCIÉTÉ AMSTERDAMOISE (WITTENBURG)

**Pl. XLIV.** — *Planchers et poutres.* — Caisse d'épargne d'Amsterdam. — Dalles des quais de Rotterdam. — Fabrique de margarine, à Osch. — Atelier de réparation des télégraphes de l'Etat. — Poutre supportant un mur de façade.

**Pl. XLV.** — *Radier de fondation.* — *Escalier.* — Cave étanche de la Bourse d'Amsterdam. — Hôtel Mercurius, à la Haye.

## SYSTÈME DEMAY FRÈRES

**Pl. XLVI.** — *Réservoirs.* — Réservoir de 100 mètres cubes, à Arcis-en-Brie. — Réservoir de 1.000 mètres cubes, à Reims. — Réservoir de 7.000 mètres cubes, à Beauval (Somme).

## SYSTÈME COULAROU

**Pl. XLVII.** — *Escalier.* — *Couverture.* — Escalier à Angoulême. — Conditionnement privé de Roubaix-Tourcoing.

## SYSTÈME DÈGON

**Pl. XLVIII.** — *Travaux divers.* — Cloisons et revêtements. — Poutres et planchers. — Hourdis de planchers sur solives en fer. — Colonnes et piliers. — Tuyaux.

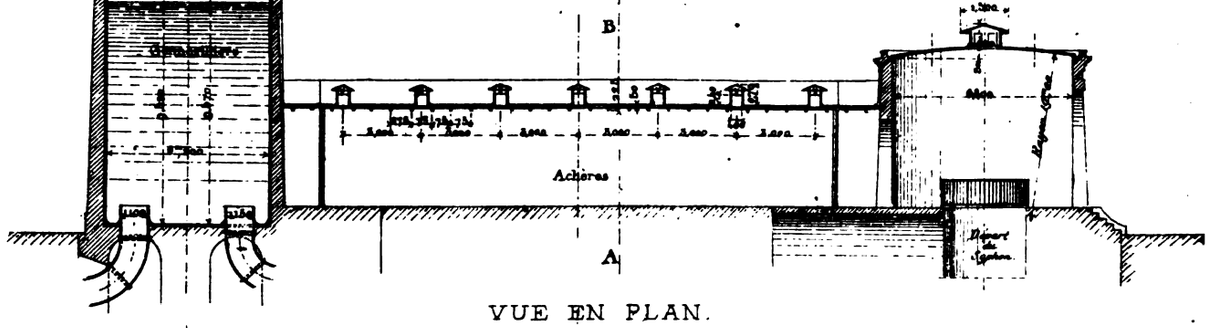
## SOCIÉTÉ DES CHAUX ET CIMENTS DE LA PORTE DE FRANCE

**Pl. XLIX.** — Lavoir public à Gy (Haute-Saône). — Réservoir à Fourcatier (Doubs). — Réservoir de 510 mètres cubes, pour la distribution d'eau de Belley (Ain). — Canalisation de Moutiers. — Planchers, à Grenoble et à Aix-les-Bains.

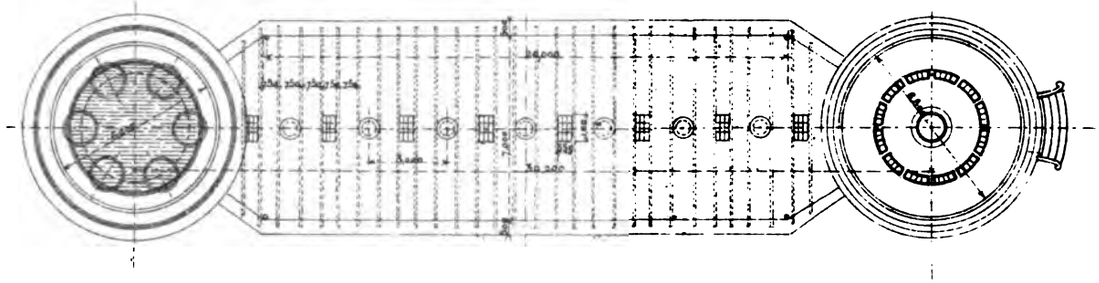
TOURS, IMPRIMERIE DESLIS FRÈRES, 6, RUE GAMBETTA.

## BACHES DE GENNEVILLIERS ET D'ACHÈRES.

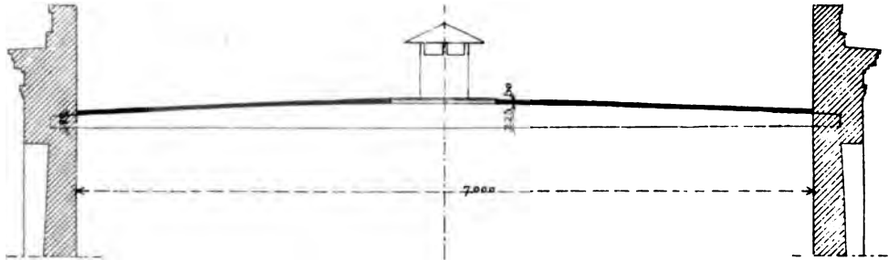
### COUPE LONGITUDINALE



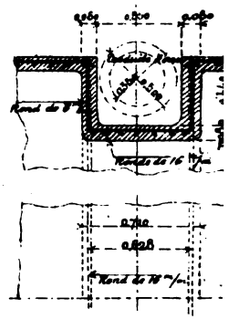

### VUE EN PLAN.



### COUPE SUIVANT **AB**

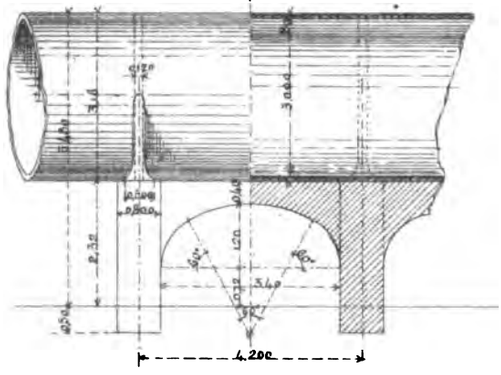


### COUPE SUR **GH**

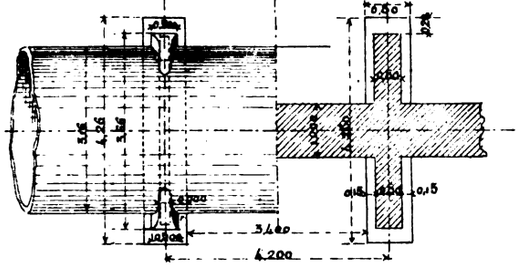


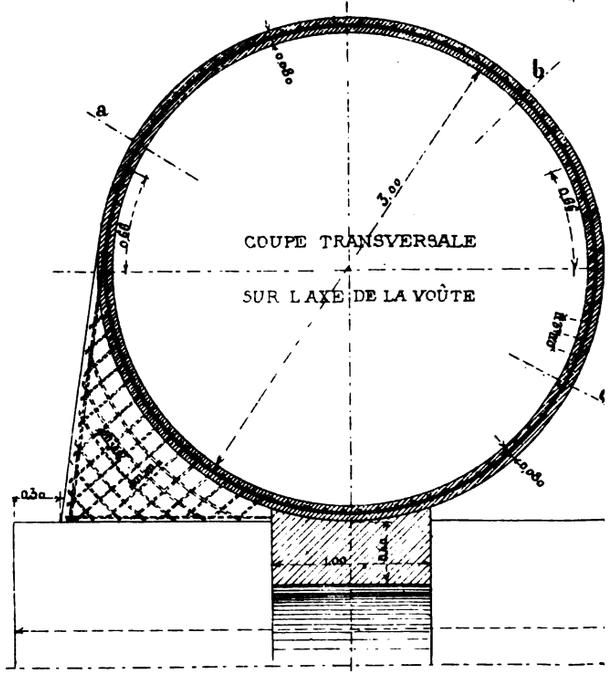
### GALERIE LIBRE

ÉLÉVATION | COUPE LONGITUDINALE



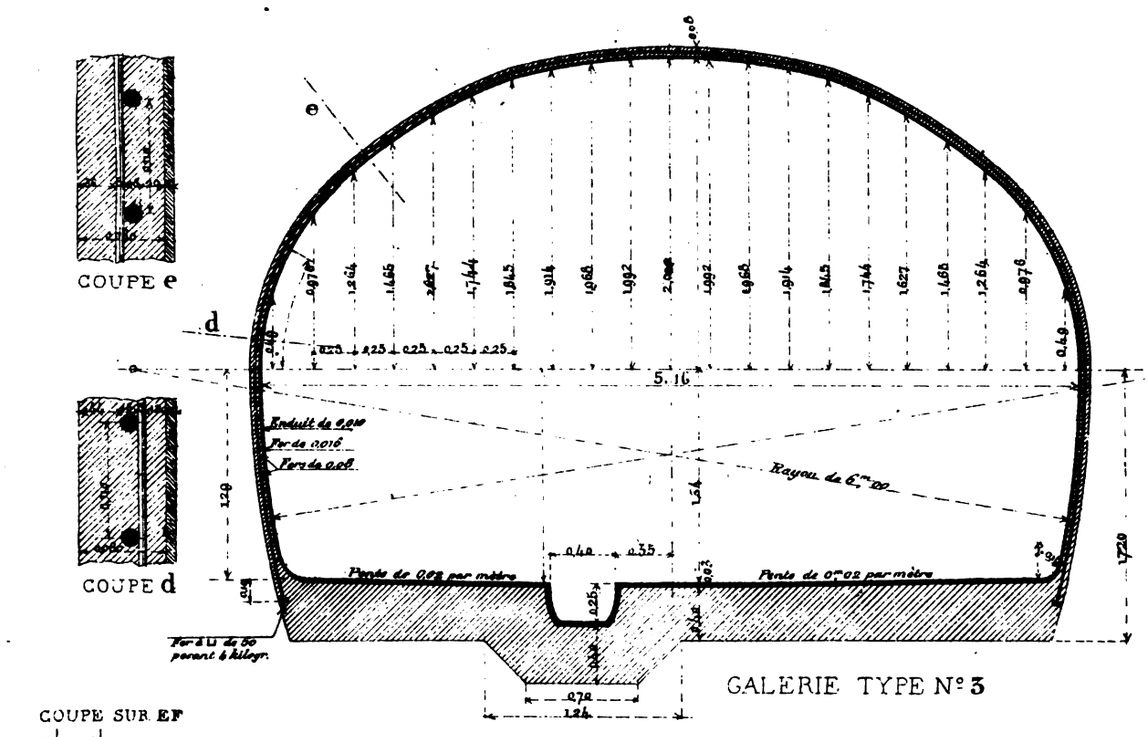
PLAN AU DESSUS DE LA GALERIE | PLAN AU DESSOUS DE LA GALERIE



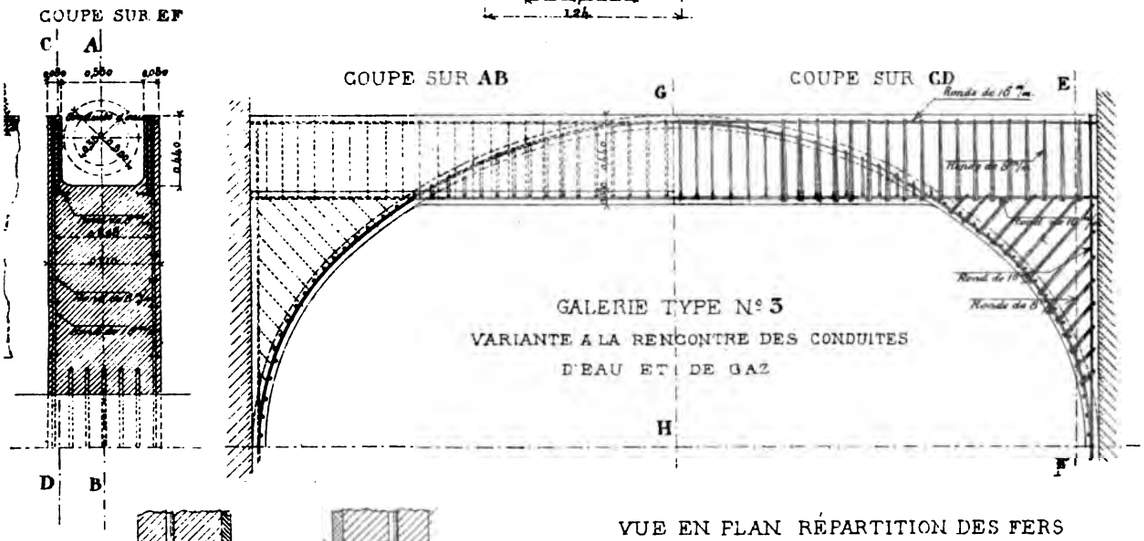


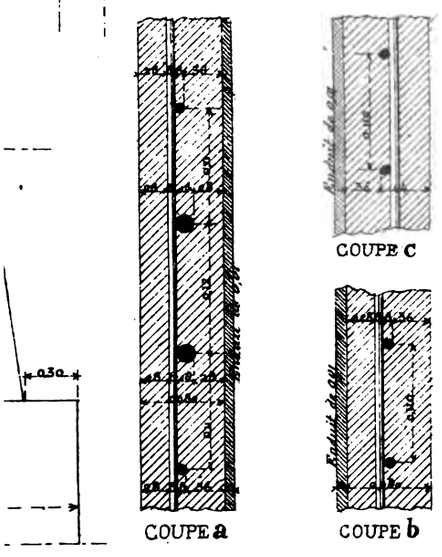
# D'ACHÈRES

Ingénieur-Constructeur: Mr E. COIGNET.




GALERIE TYPE N° 3




VUE EN PLAN RÉPARTITION DES FERS
GALERIE N°3-VARIANTE-

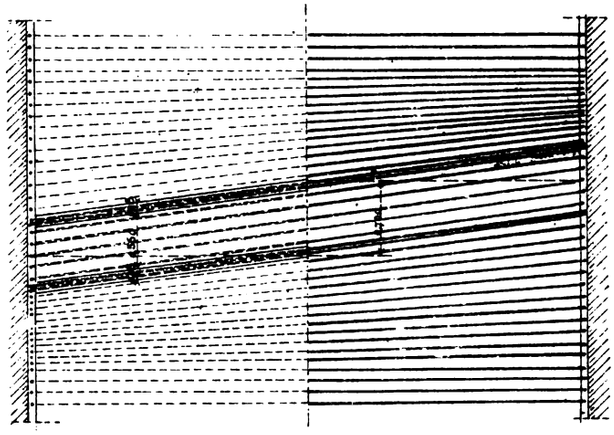
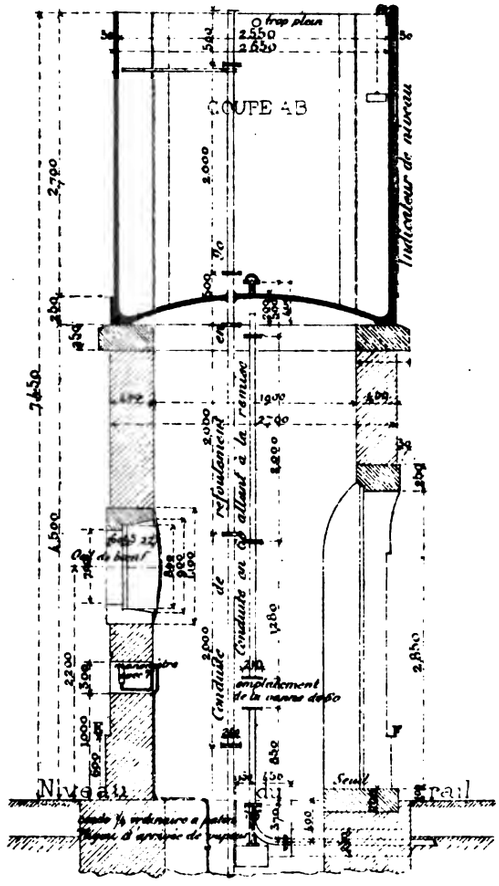
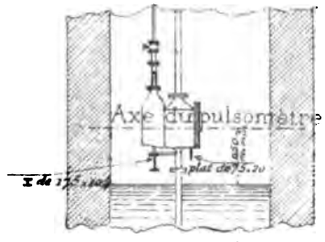


**Planche I.**

## RÉSERVOIR DE 15 M³
### AVEC CUVE EN CIMENT ARMÉ

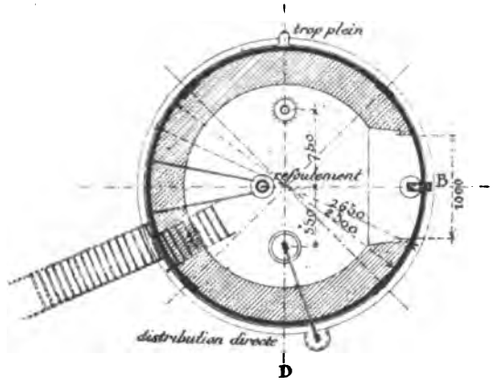


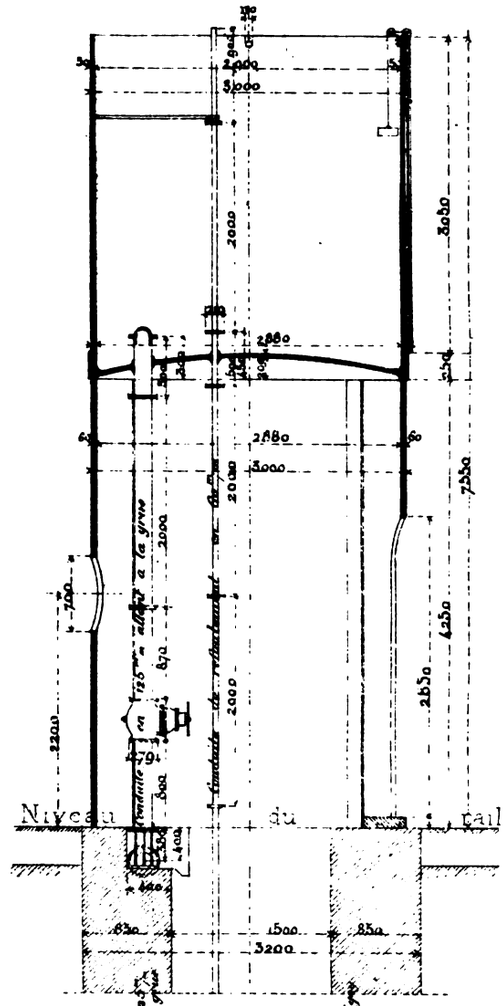

*Nota* – Les échelles de la tour du réservoir et du puits sont constituées par des montants de 50.10 réunis par des barreaux en fer rond de 10 espacés de 300 m/m

*Nota* – L'échelle extérieure celle du réservoir et du puits sera composée de montants de 50/10 réunis par des barreaux de 10 espacés de 300

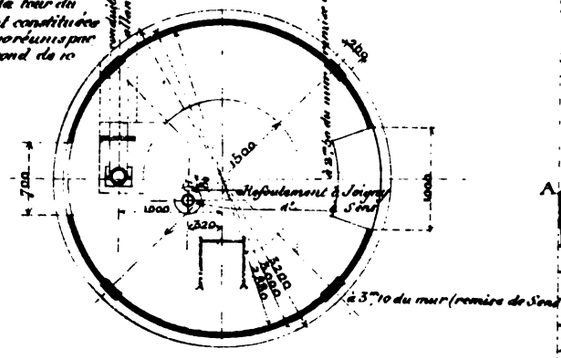
PLAN

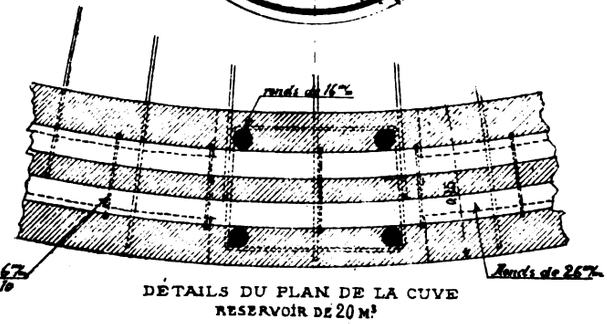



## RESERVOIR DE 20 M³
### AVEC TOUR EN CIMENT ARMÉ




PLAN




DÉTAILS DU PLAN DE LA CUVE
RESERVOIR DE 20 M³

# VOIRS

*Ingénieur-Constructeur* : M^TE COIGNET

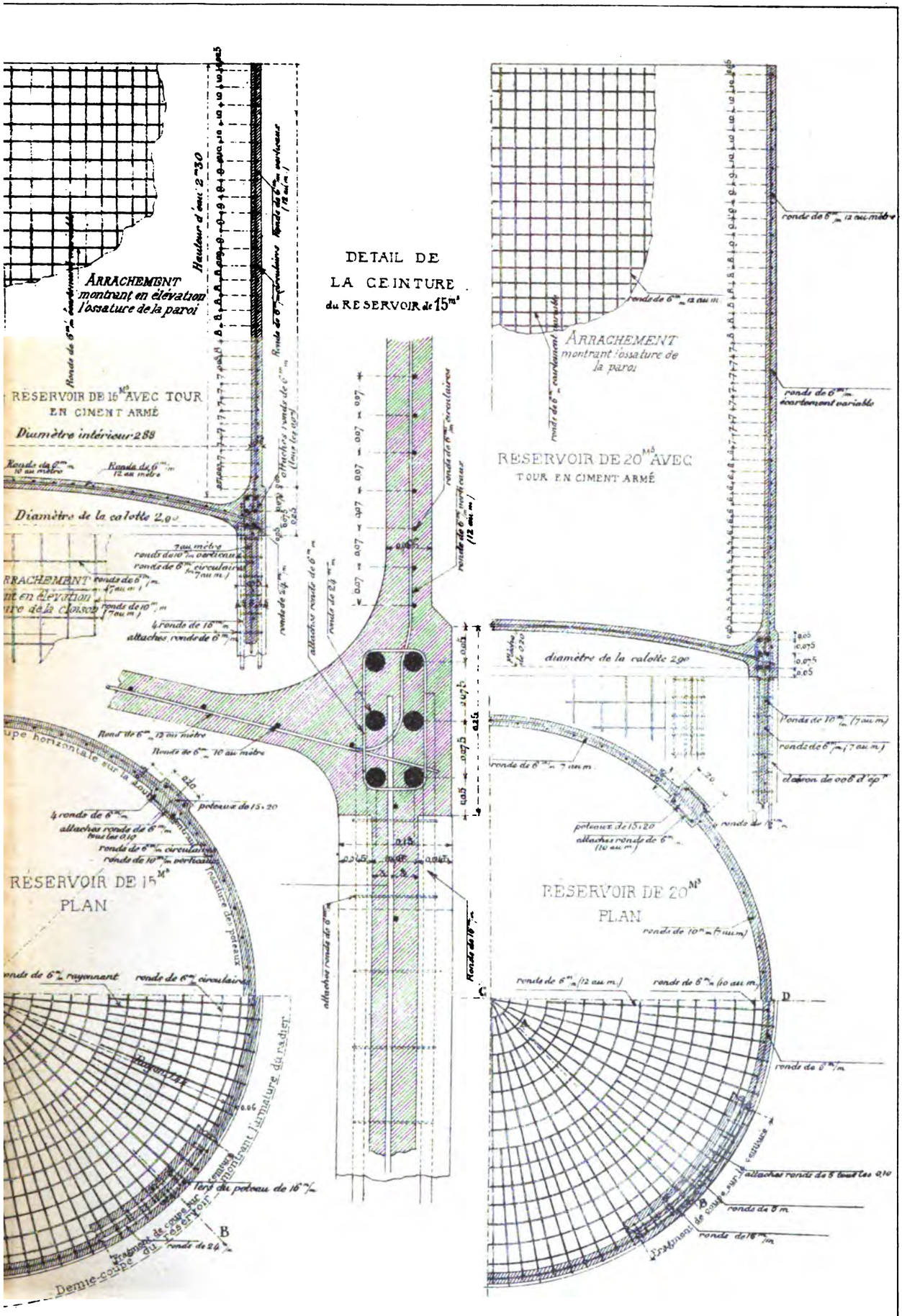
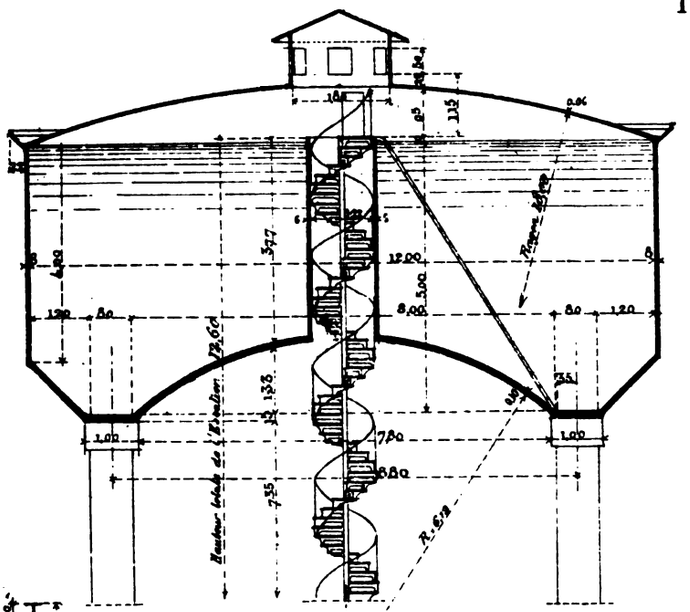
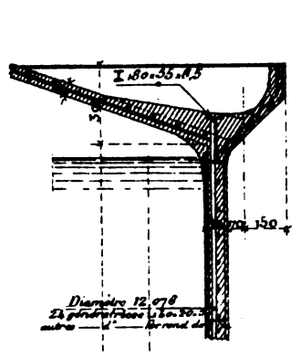


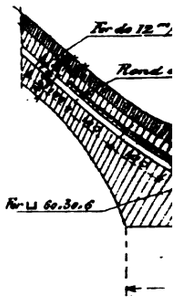

**Planche II.**

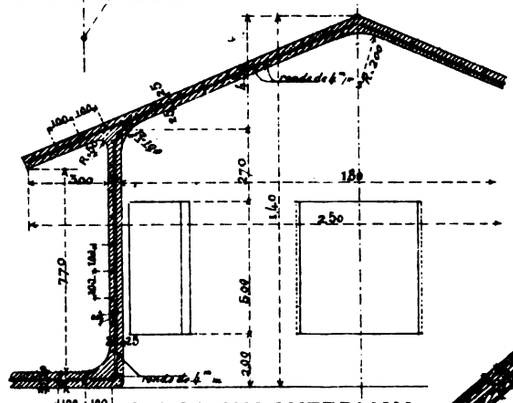
# RÉSERVOIR DE 500 M3



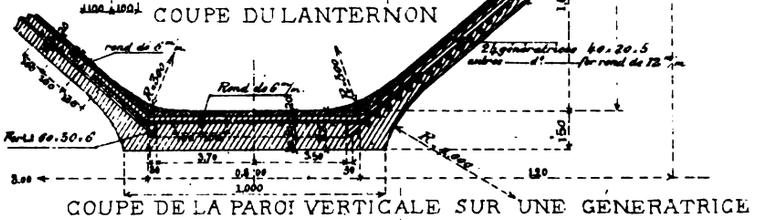
COUPE D ENSEMBLE



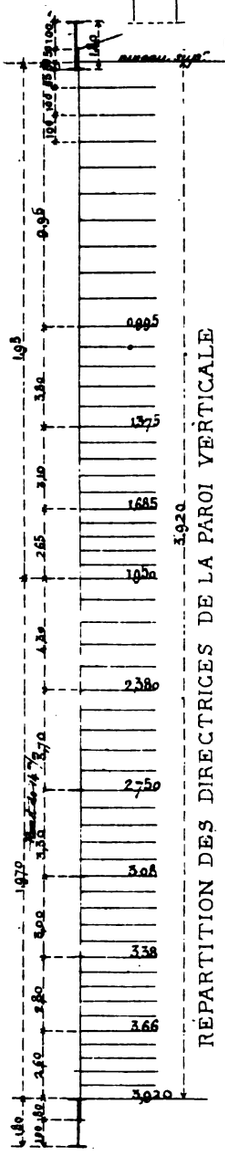




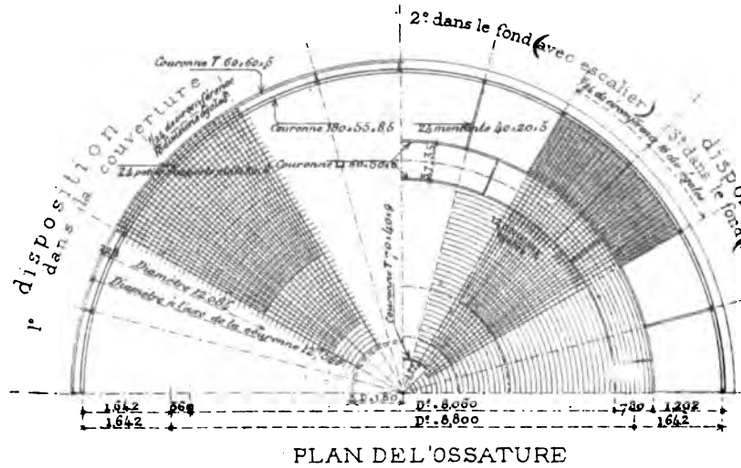
COUPE DU LANTERNON



COUPE DE LA PAROI VERTICALE SUR UNE GÉNÉRATRICE



RÉPARTITION DES DIRECTRICES DE LA PAROI VERTICALE



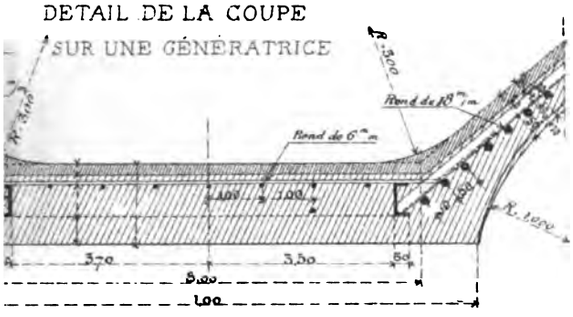
PLAN DE L'OSSATURE

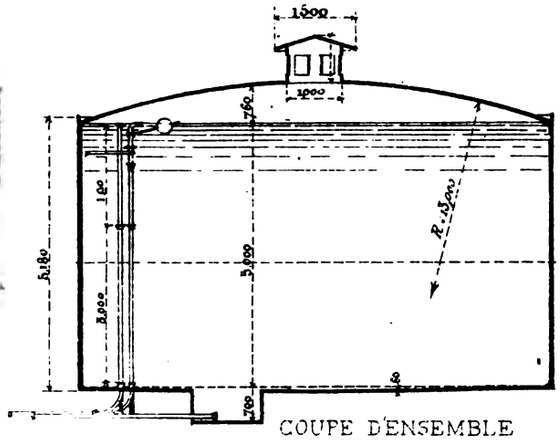
# TEAUX D'EAU

Ingr Constructeur : Mr E. COIGNET

## CHÂTEAU D'EAU

DÉTAIL DE LA COUPE SUR UNE GÉNÉRATRICE

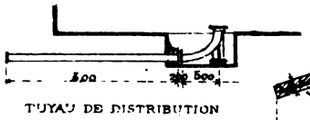


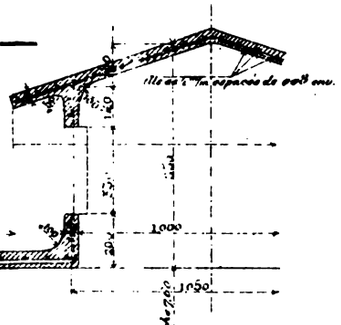

COUPE D'ENSEMBLE

## IR DE 300 M³. CHANTIER DE CAUDAN PORT DE LORIENT

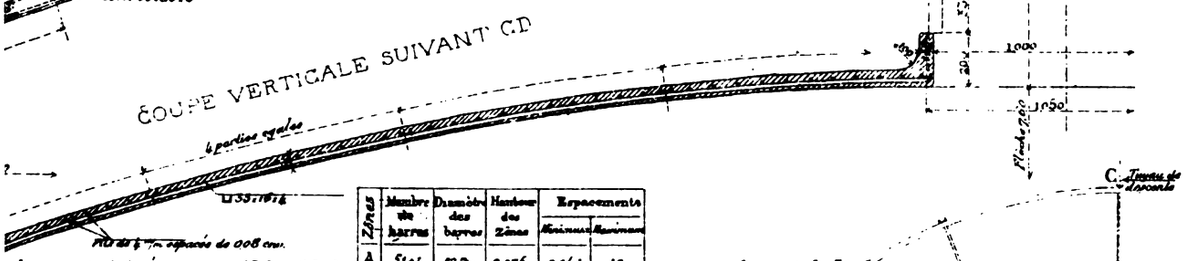
ANT LE TROU D'HOMME




TUYAU DE DISTRIBUTION

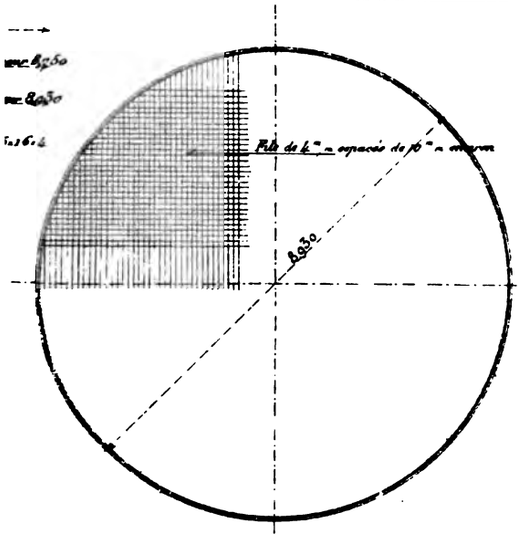



COUPE VERTICALE SUIVANT CD



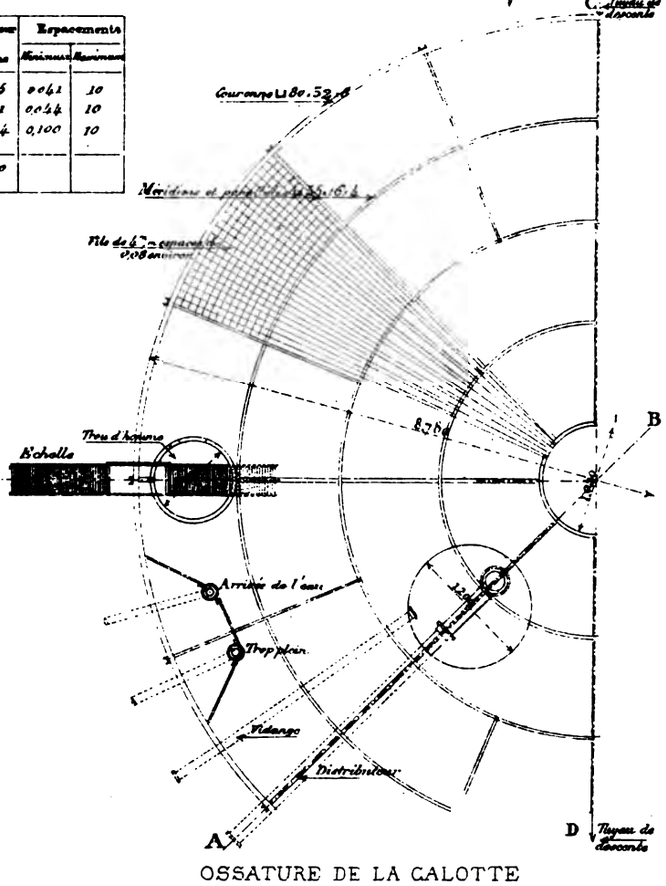

La paroi verticale du réservoir comprend 3 zônes distinctes :
Zône A — directrices en barres de fer rond de 12 } à distt. variables, de bas en haut.
d° B ——— d° ——— 8 }
d° C ——— d° ——— 8 équidistantes.

| Zônes | Nombre de barres | Diamètre des barres | Hauteur des Zônes | Espacements Minimum | Espacements Maximum |
|---|---|---|---|---|---|
| A | 51+1 | 12 m/m | 2,975 | 0,041 | 10 |
| B | 18 | 8 m/m | 1,081 | 0,044 | 10 |
| C | 8 | 8 m/m | 0,044 | 0,100 | 10 |
| | 78 | | 5,000 | | |




OSSATURE DU RADIER
à l'échelle de la coupe d'ensemble

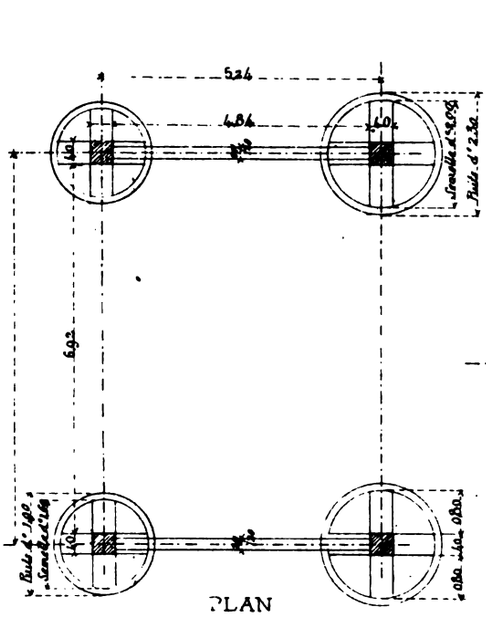
.60.30.6.



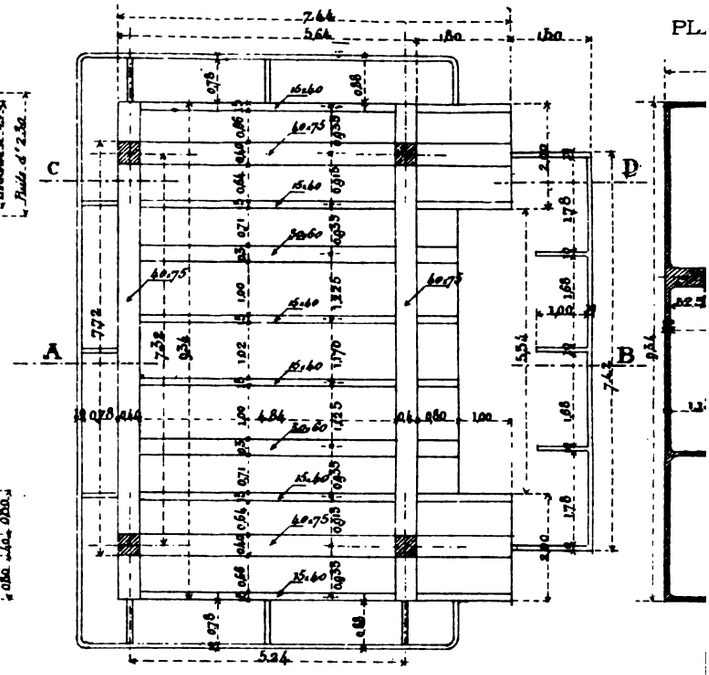

OSSATURE DE LA CALOTTE

Planche III

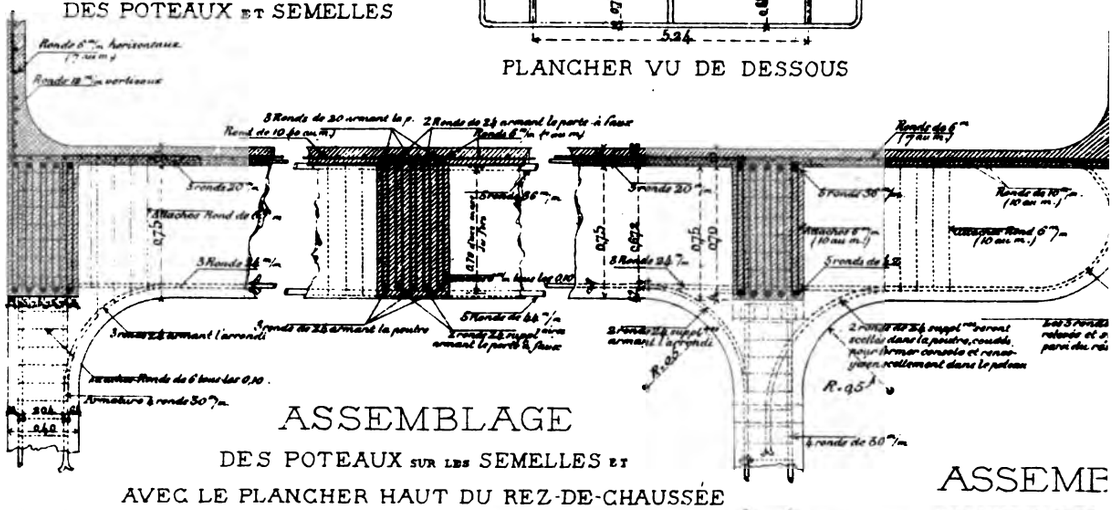
# RÉSERVOIR DE L'USINE DI



PLAN
DES POTEAUX ET SEMELLES

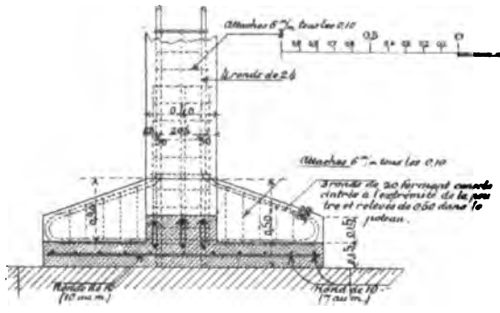


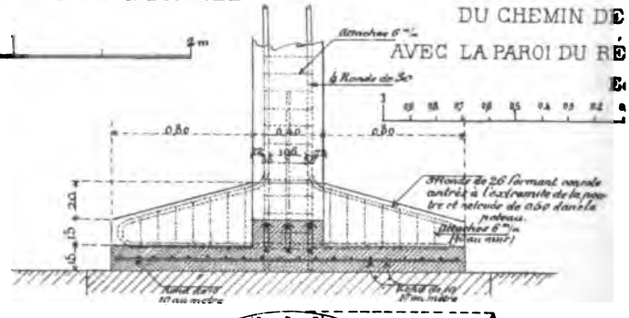
PLANCHER VU DE DESSOUS



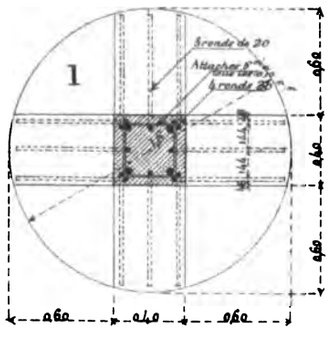
ASSEMBLAGE
DES POTEAUX SUR LES SEMELLES ET
AVEC LE PLANCHER HAUT DU REZ-DE-CHAUSSÉE

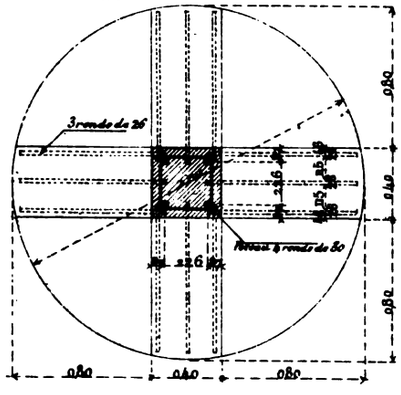
Echelle





ASSEME
DU CHEMIN DE
AVEC LA PAROI DU RÉ





# Mrs SAUTTER ET HARLÉ

Ingr Constructeur : MTE COIGNET

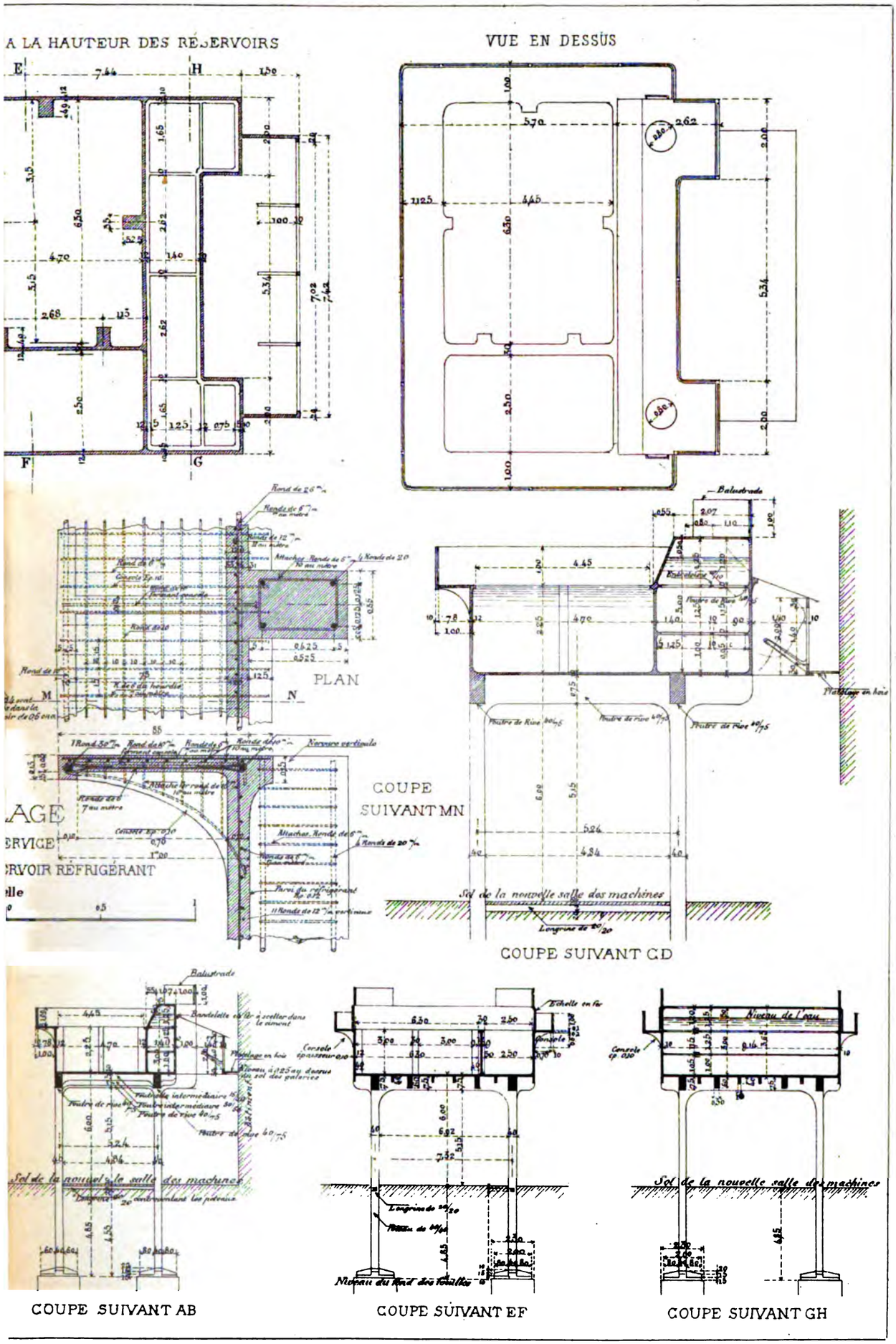
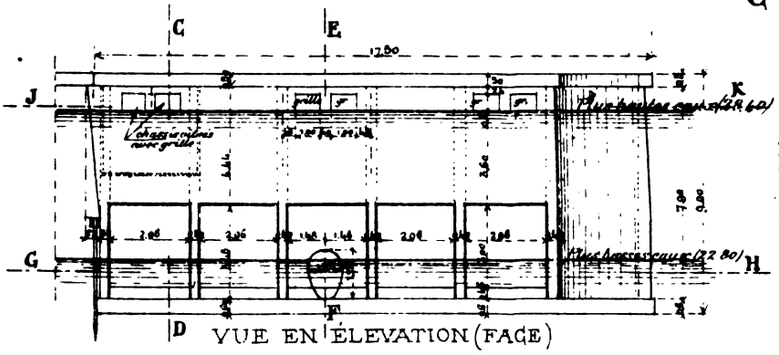


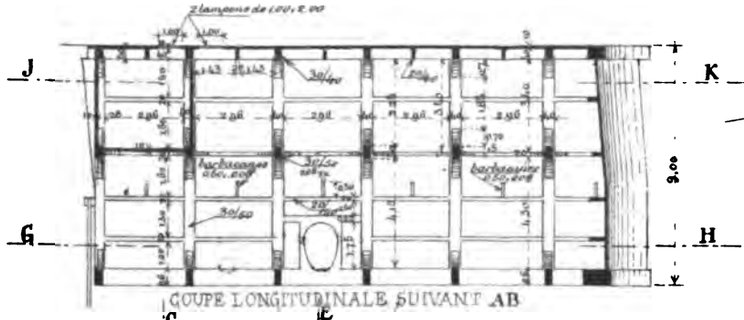

**Planche IV.**

# ESTACADE SU

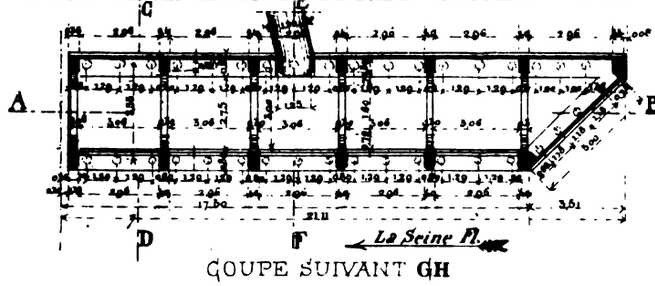
## Cie DU SECTEUR ÉLECTRIQ




VUE EN ÉLÉVATION (FACE)

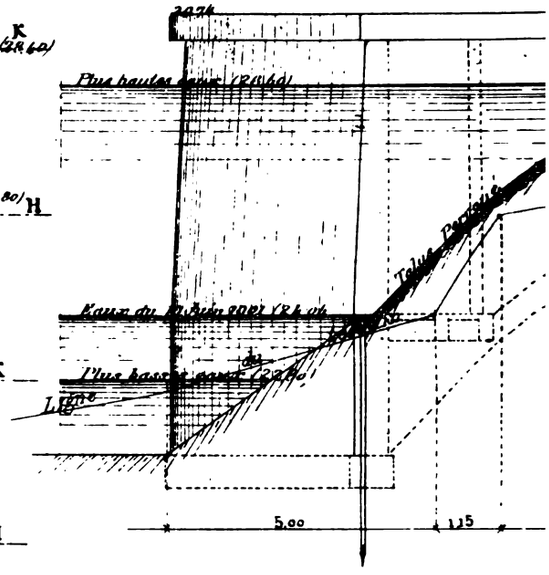



COUPE LONGITUDINALE SUIVANT AB

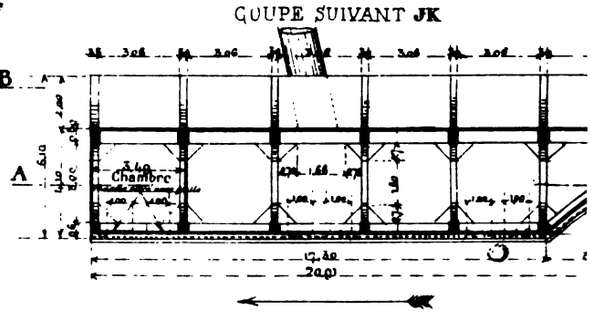



COUPE SUIVANT GH

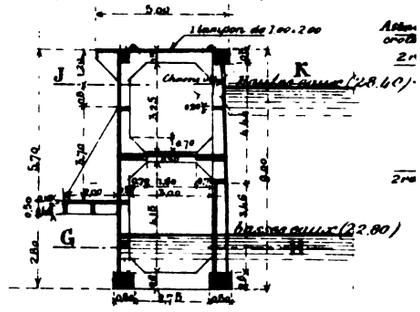
VUE EN ÉLÉVATION

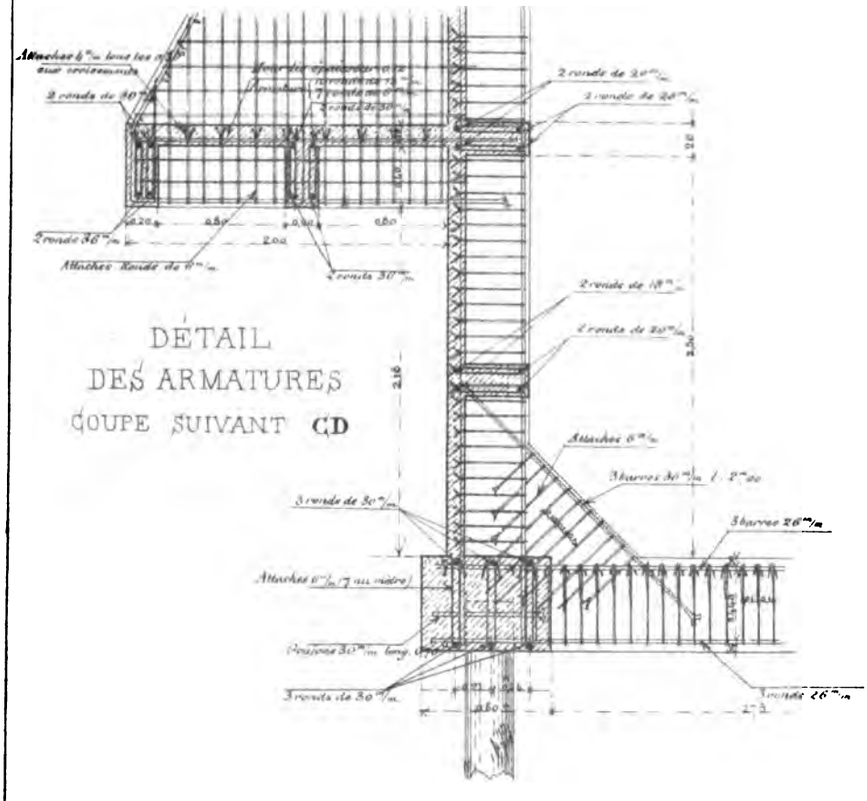



COUPE SUIVANT JK

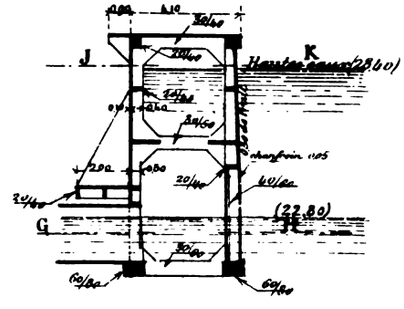



COUPE SUIVANT CD




COUPE SUIVANT EF



# ...R LA SEINE

*Ingénieur - Constructeur:* Mr COIGNET

## ...E DES CHAMPS ÉLYSÉES

...ON _ AMONT

DÉTAIL DES ARMATURES

COUPE SUIVANT **EF**

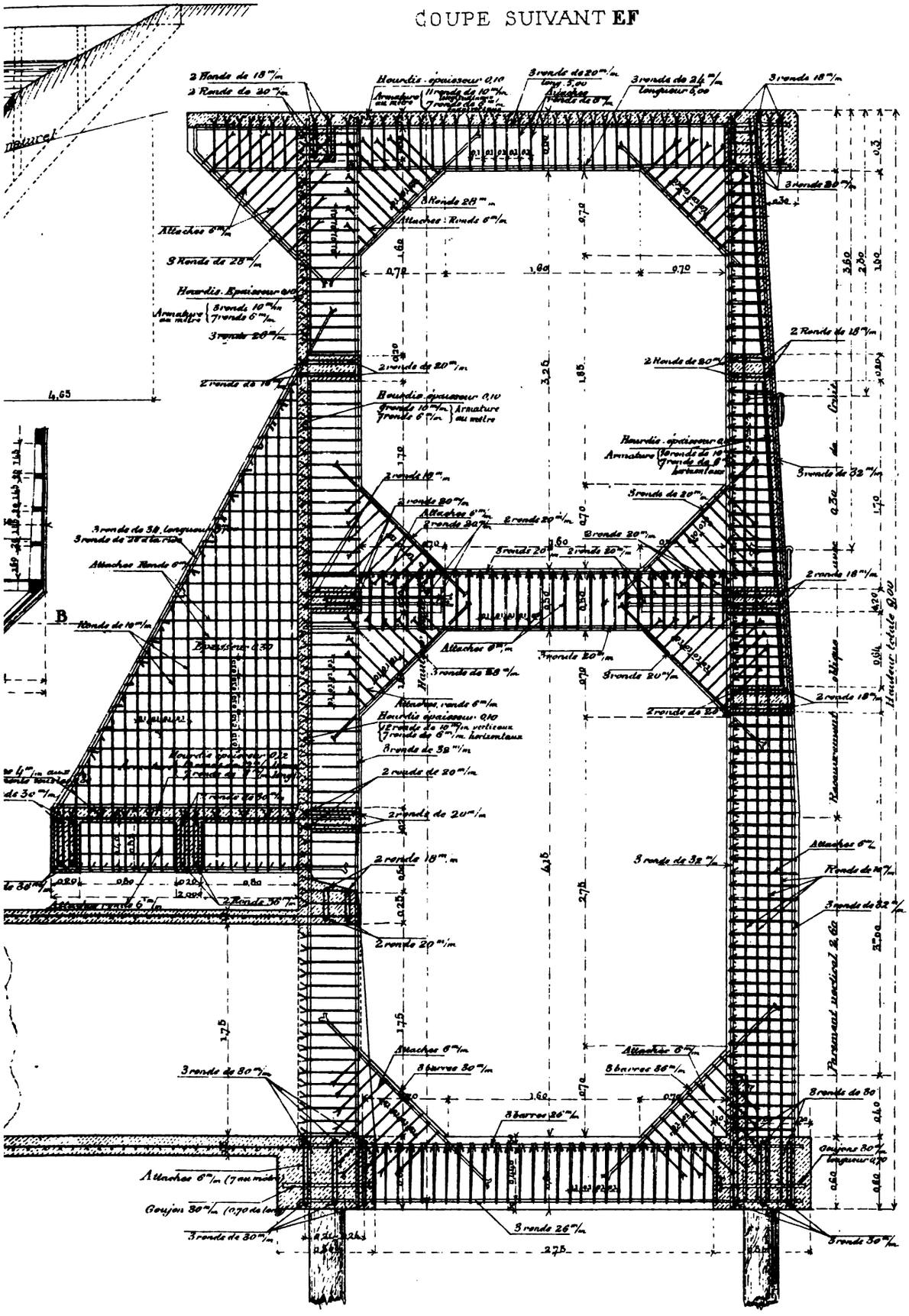
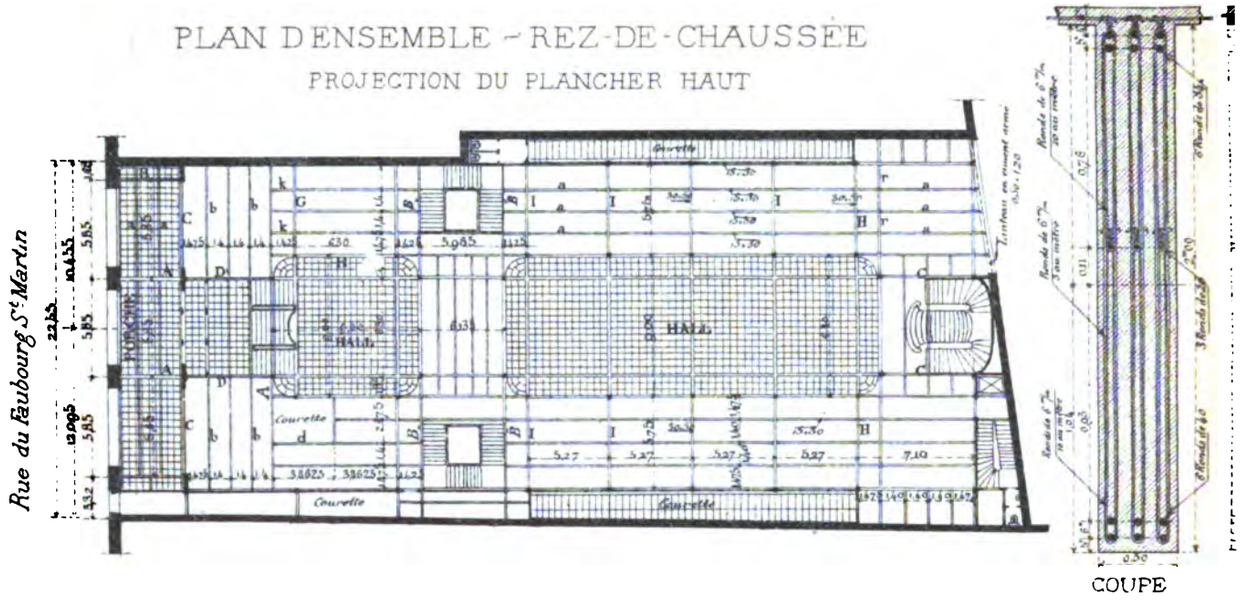
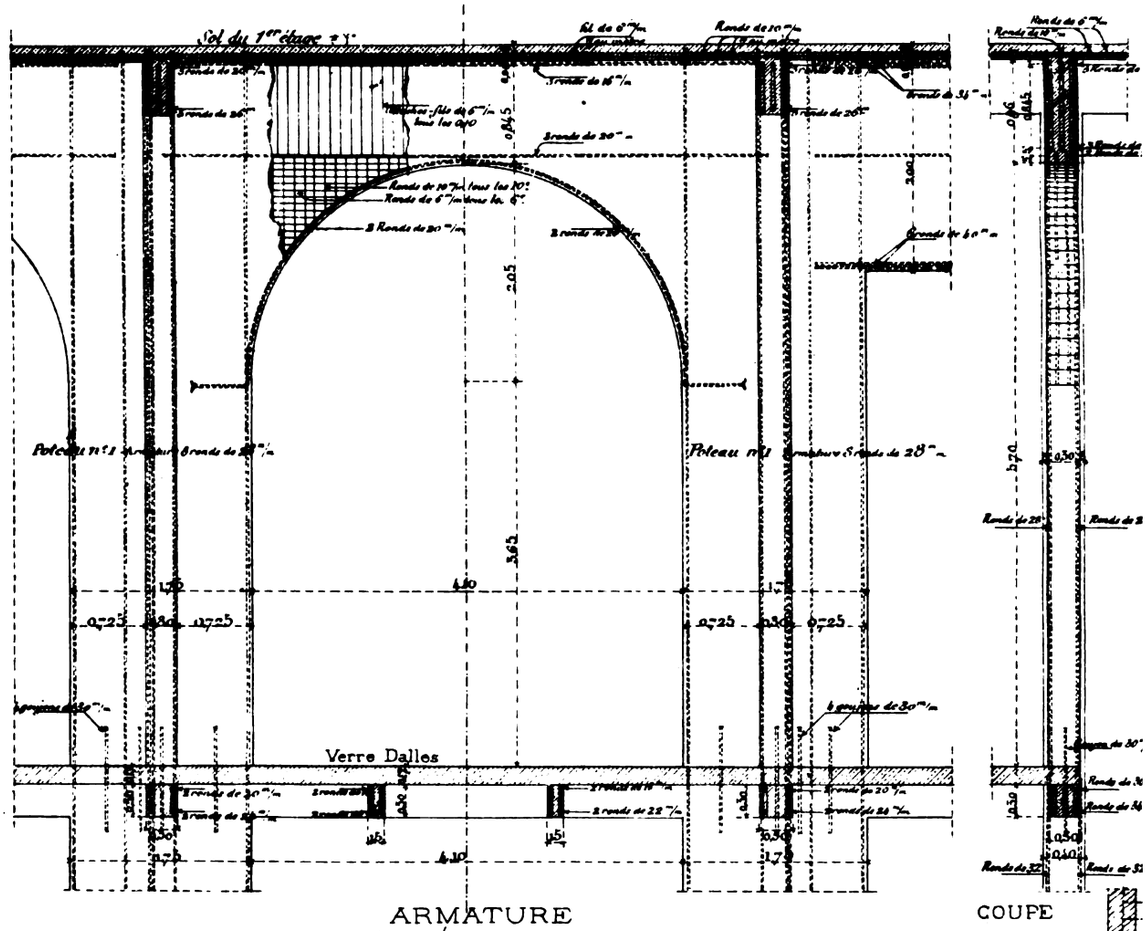



**Planche V.**

# MAGASIN DE LA SOCIÉTÉ « A

## PLAN D'ENSEMBLE - REZ-DE-CHAUSSÉE
PROJECTION DU PLANCHER HAUT

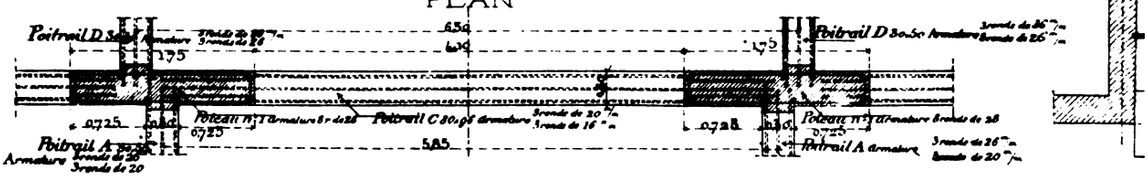



## ARMATURE D'UNE TRAVÉE DU PORCHE

Echelle

PLAN



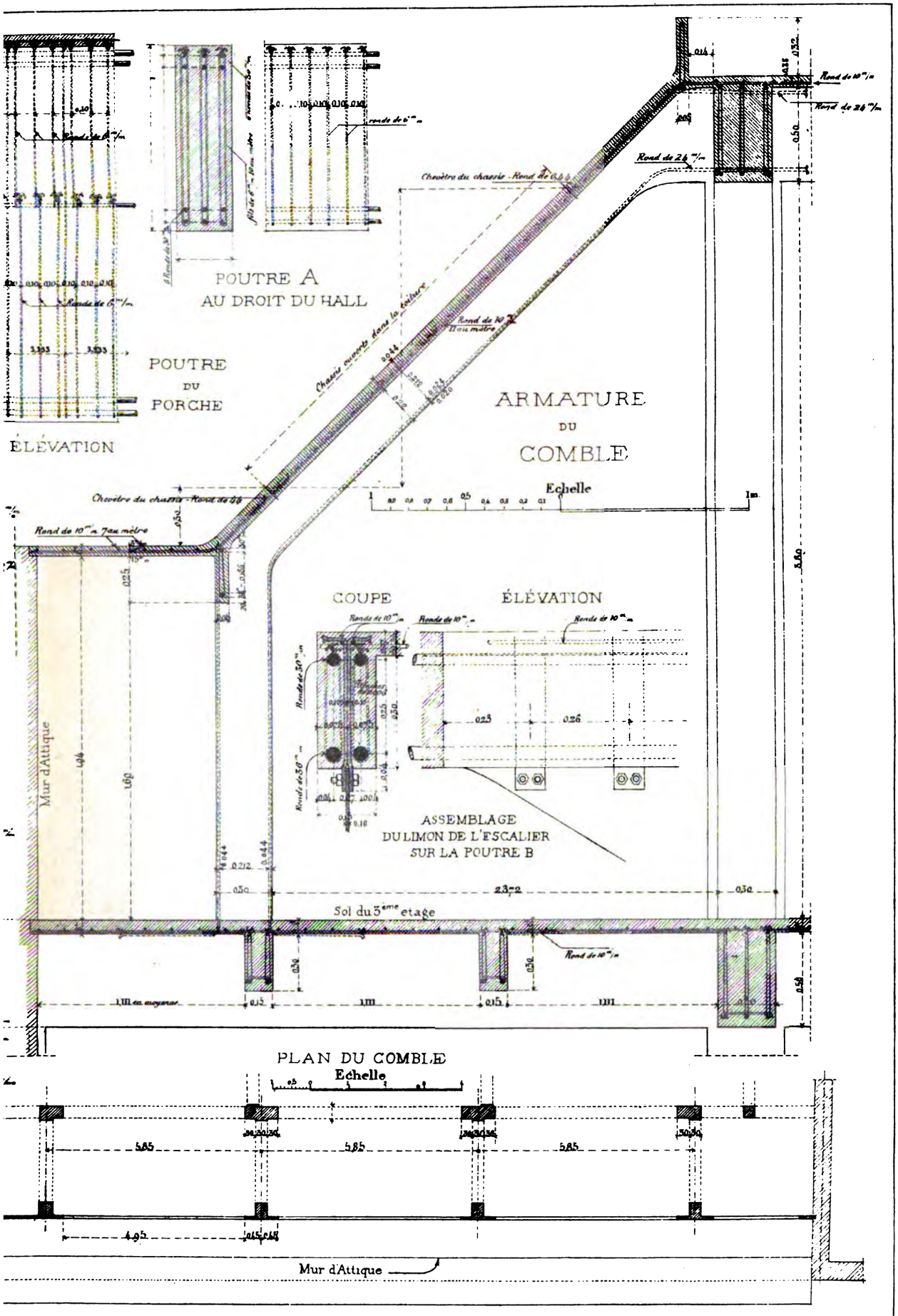
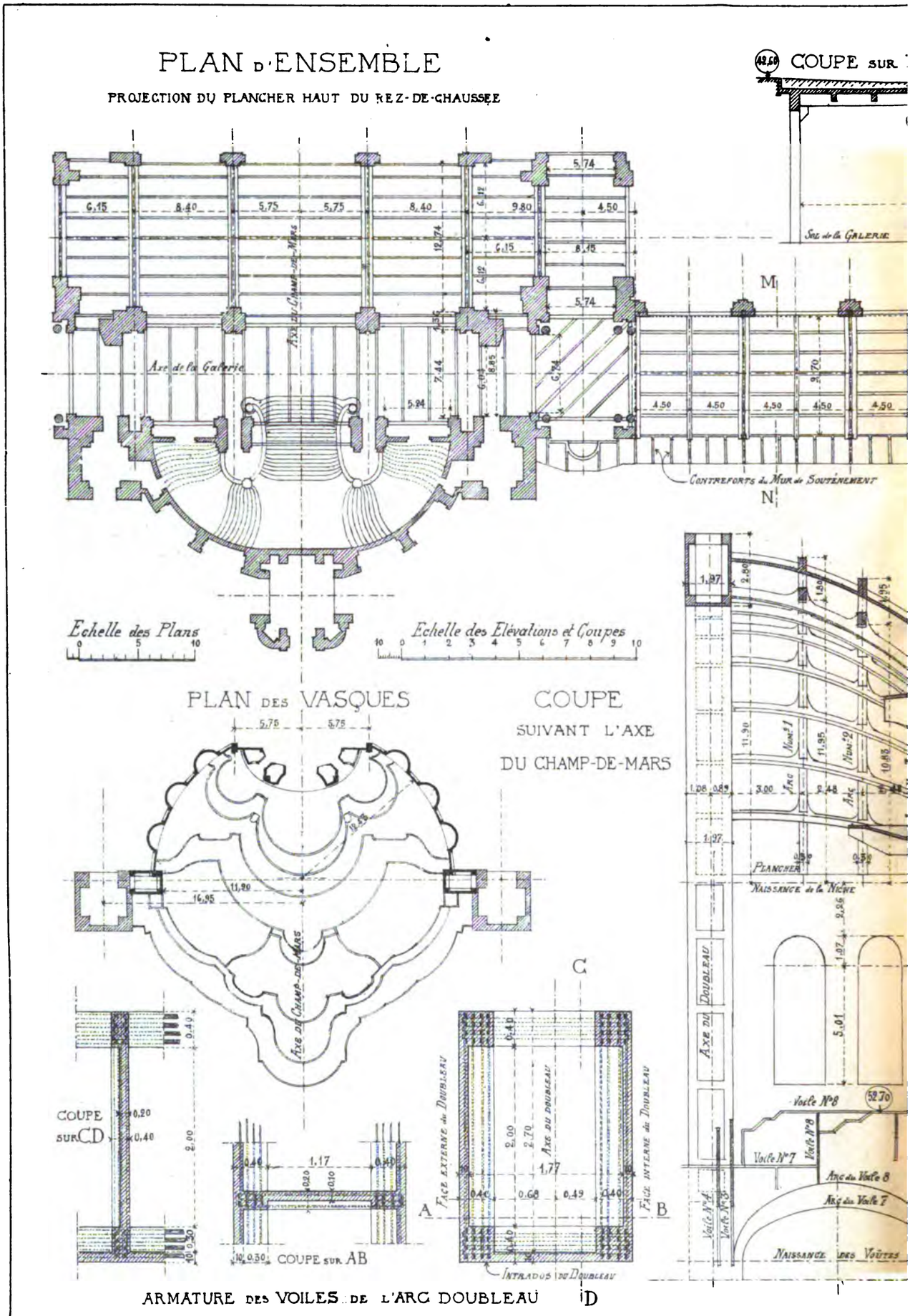

POUTRE A
AU DROIT DU HALL
POUTRE
DU
PORCHE
ÉLÉVATION
ARMATURE
DU
COMBLE
Echelle
COUPE
ÉLÉVATION
ASSEMBLAGE
DU LIMON DE L'ESCALIER
SUR LA POUTRE B
Mur d'Attique
Sol du 3ème etage
PLAN DU COMBLE
Echelle
Mur d'Attique

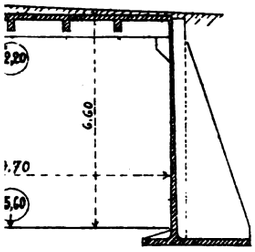
**Planche VI.**

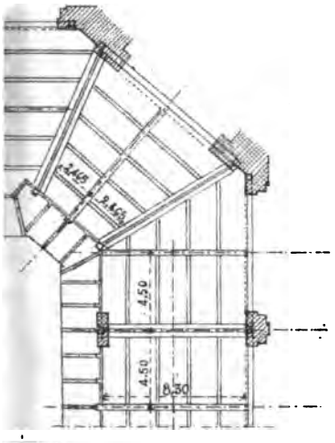

PLAN D'ENSEMBLE
PROJECTION DU PLANCHER HAUT DU REZ-DE-CHAUSSÉE
COUPE SUR
Axe du Champ-de-Mars
Axe de la Galerie
Sol de la Galerie
Contreforts du Mur de Soutènement
Echelle des Plans
Echelle des Elévations et Coupes
PLAN DES VASQUES
COUPE
SUIVANT L'AXE
DU CHAMP-DE-MARS
COUPE SUR CD
COUPE SUR AB
Face externe du Doubleau
Face interne du Doubleau
Axe du Doubleau
Intrados du Doubleau
Plancher
Naissance de la Niche
Voile N°8
Voile N°7
Arc du Voile 8
Arc du Voile 7
Naissance des Voûtes
ARMATURE DES VOILES DE L'ARC DOUBLEAU

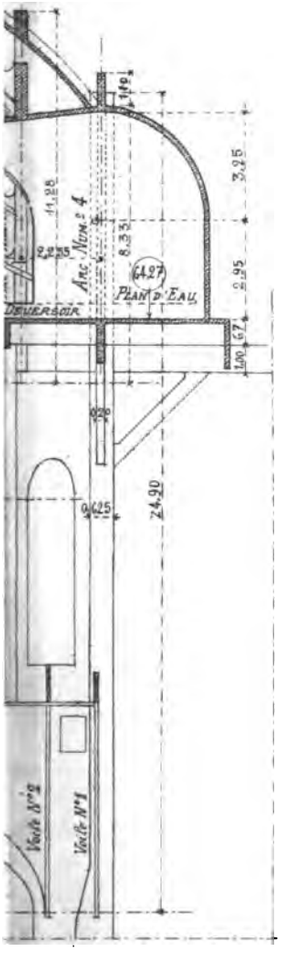
# DE 1900 - CHÂTEAU D'EAU

*Ingr Constructeur :* Mr E. COIGNET

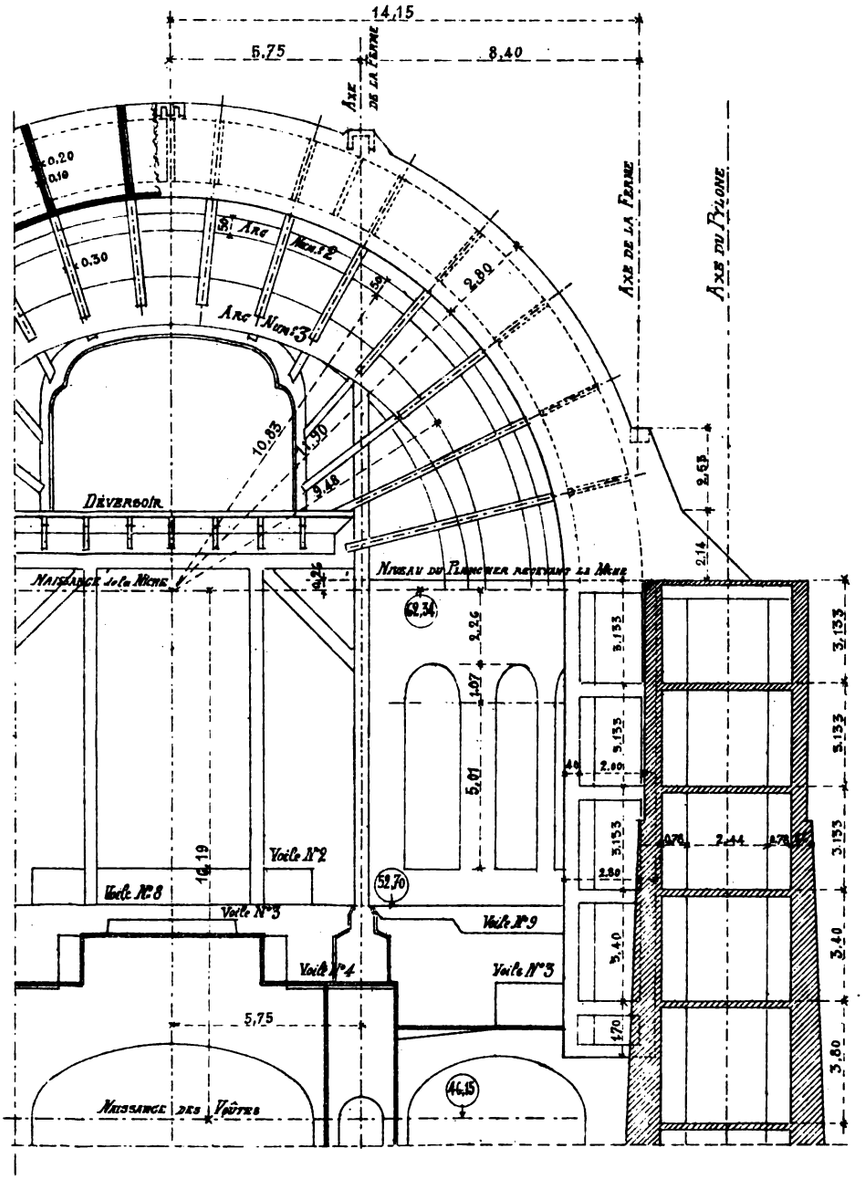
IN DU PLAN

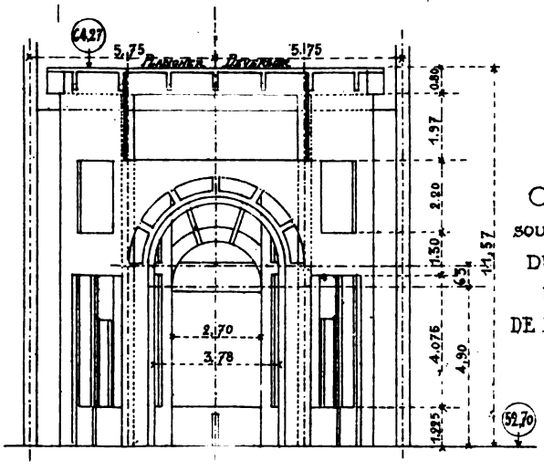






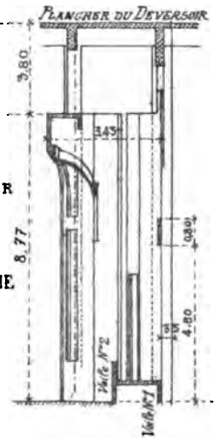

## ENSEMBLE DE LA NICHE




ÉLÉVATION PRINCIPALE

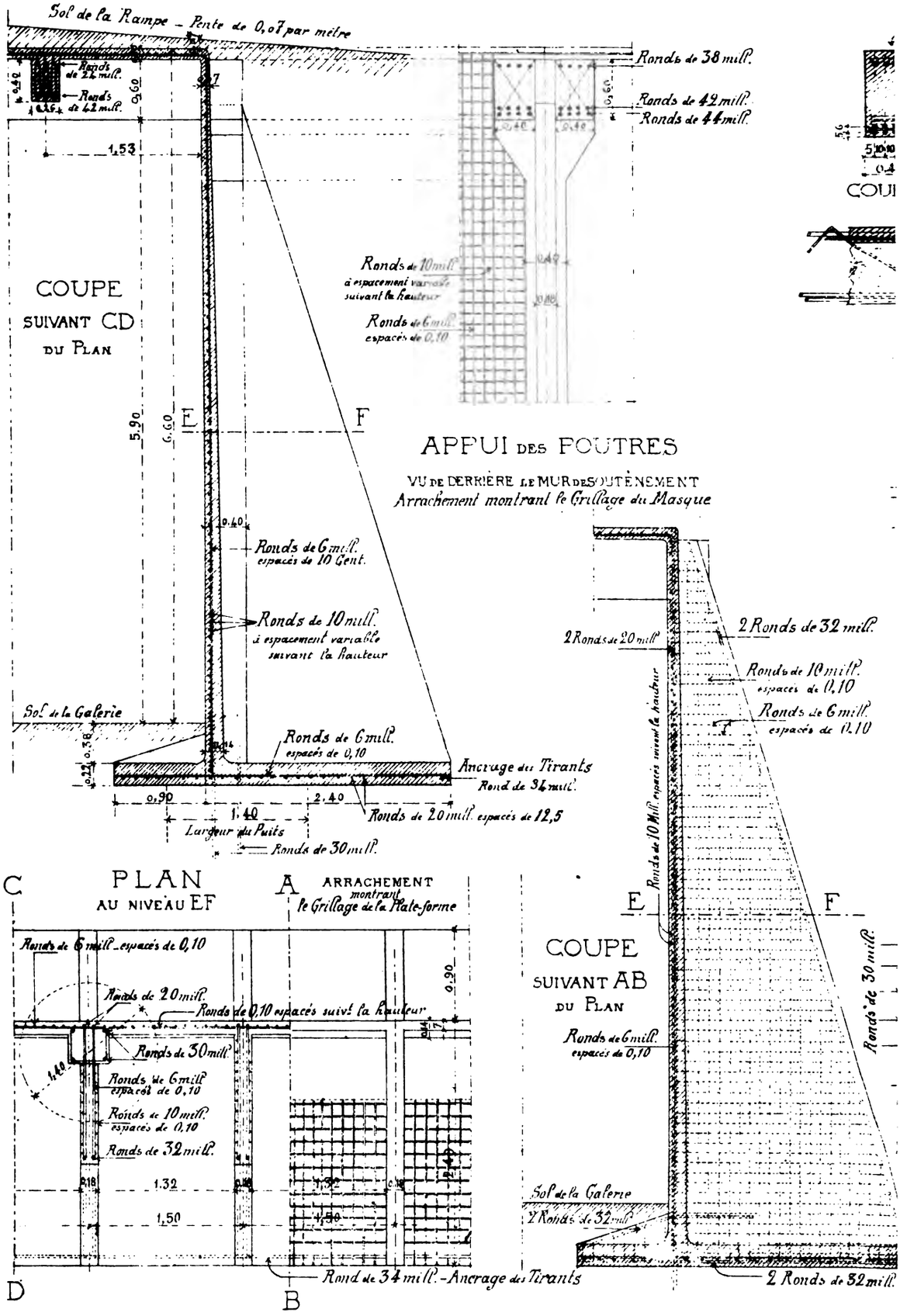
CLOISONS
SOUS LE PLANCHER
DU DÉVERSOIR
FORMANT FOND
DE LA GRANDE NICHE




COUPE SUR L'AXE

**Planche VII.**

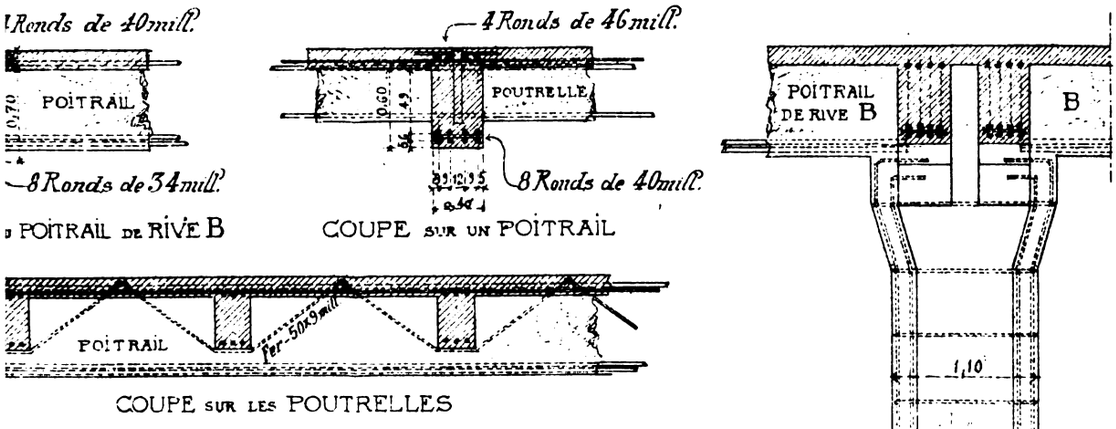
# MUR DE SOUTÈNEMENT-CONTREFORTS



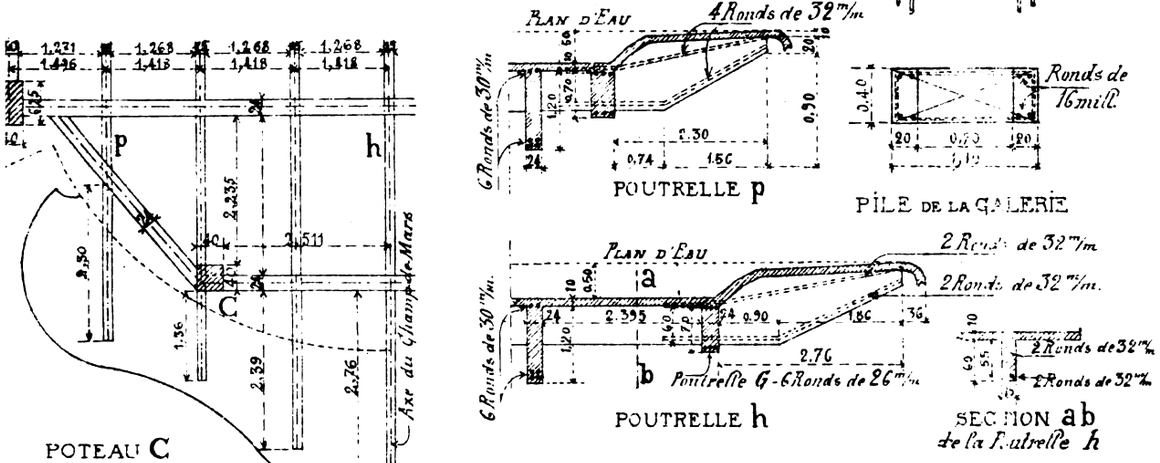
# DE 1900 - CHÂTEAU D'EAU

Ingr Constructeur : Mr E. COIGNET

## PLANCHER DES TERRASSES

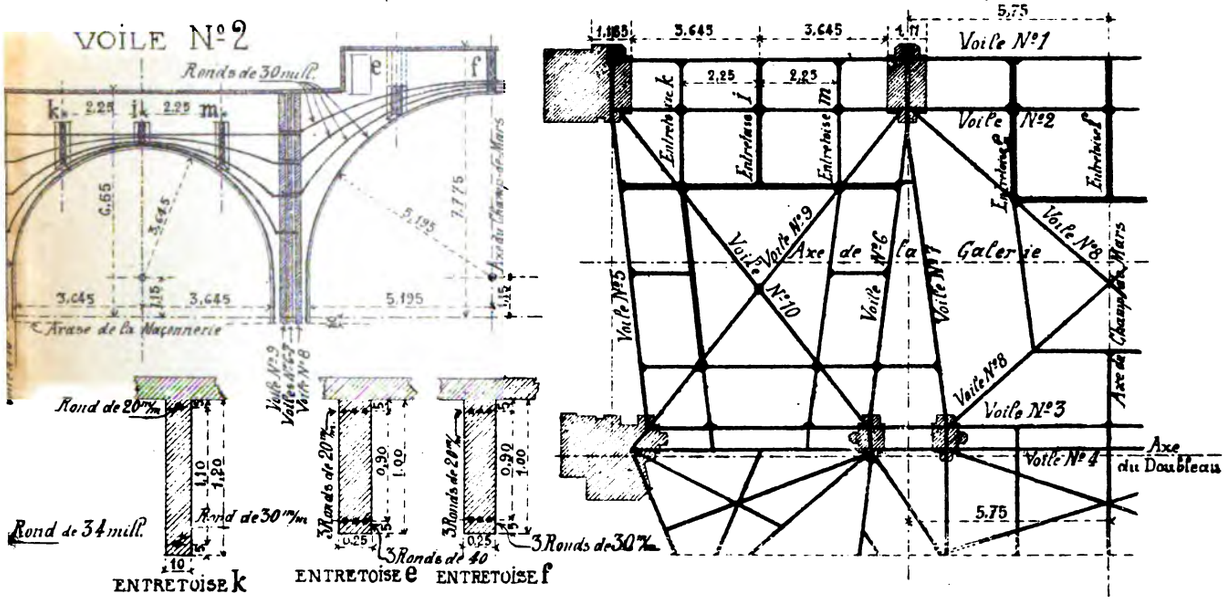



## PLANCHER DU DÉVERSOIR

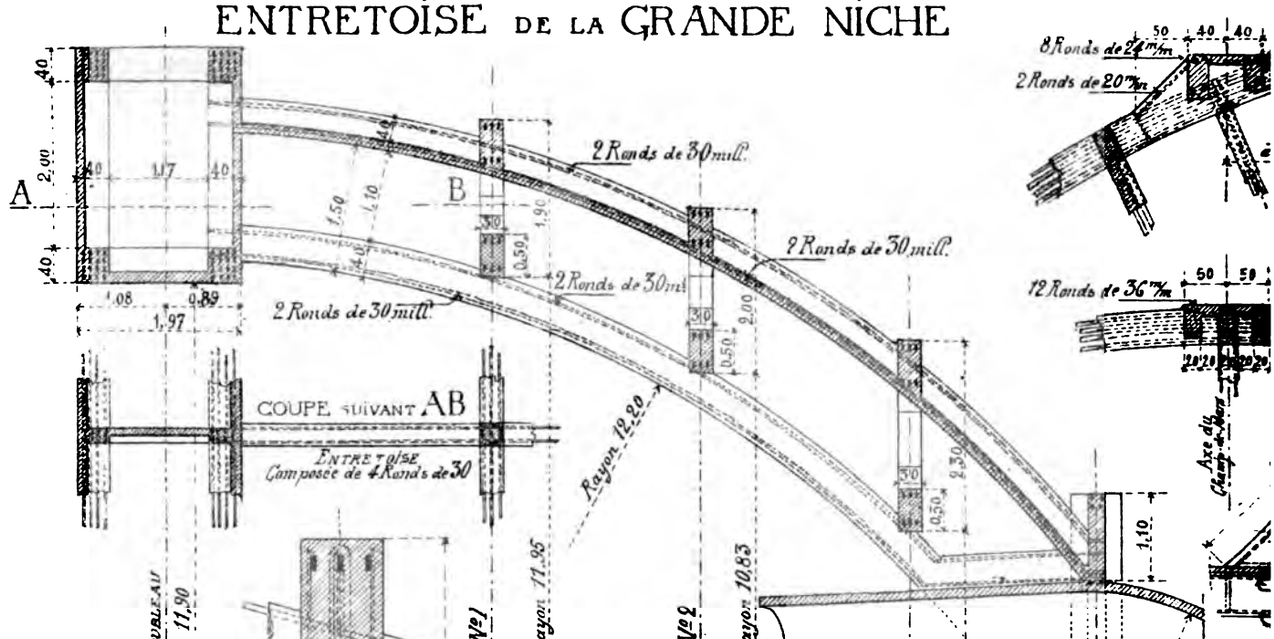



## DEMI-PLAN DES VOILES

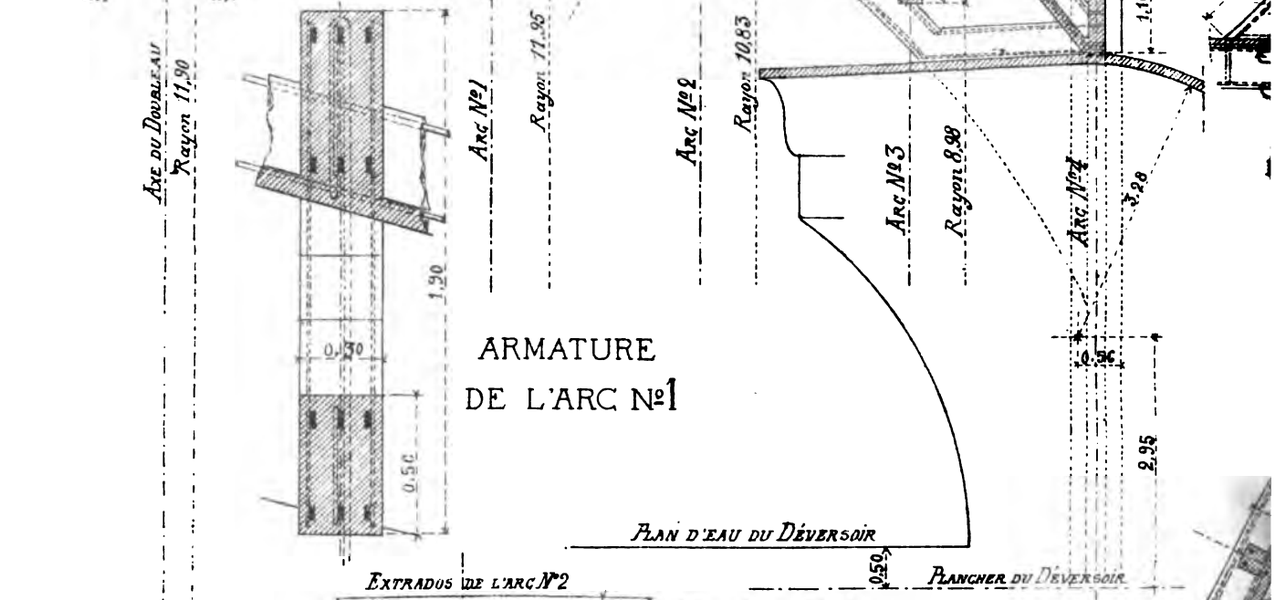
PARTIE SUPPORTANT LES VASQUES



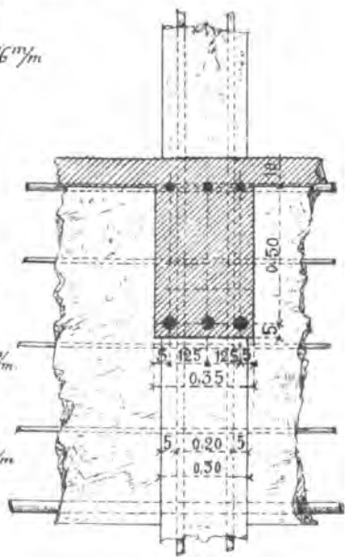
# ENTRETOISE DE LA GRANDE NICHE



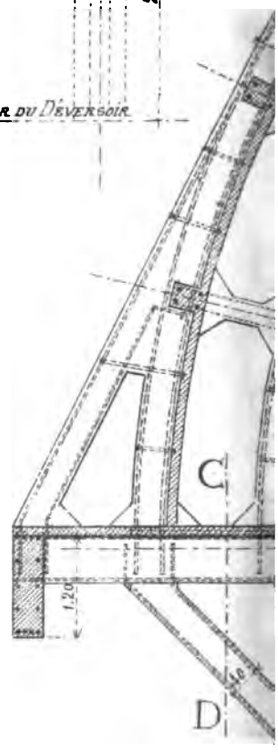

## ARMATURE DE L'ARC Nº1




## ARMATURE DE L'ENTRETOISE K



## COUPE SUR CD



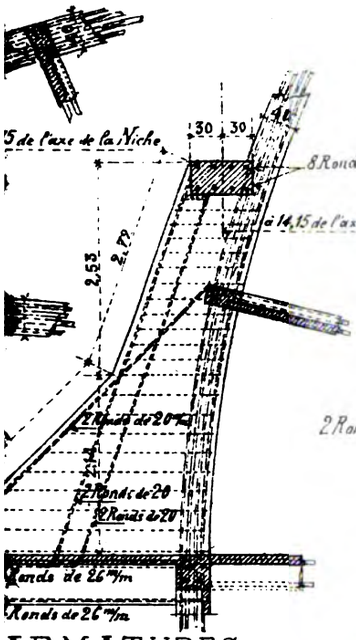

## ARC Nº2

POUTRELLE DU PLANCHER *Recevant la Niche au droit de l'Arc Nº4*

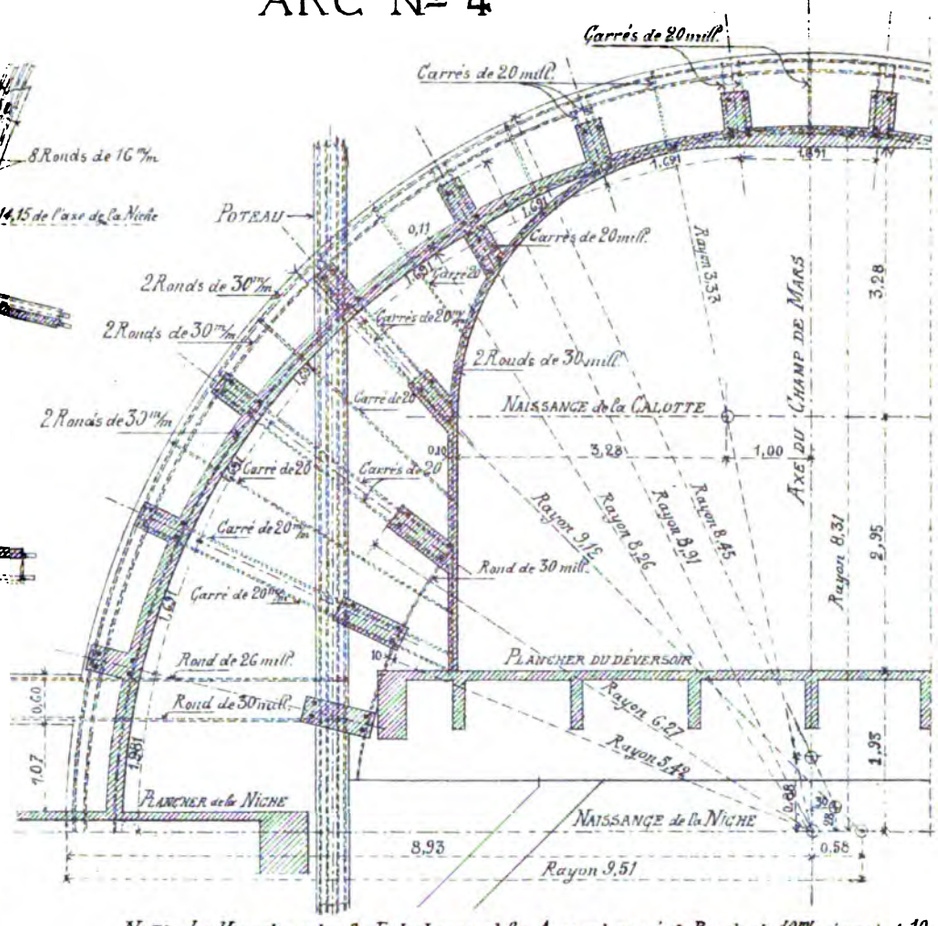
# DE 1900 - CHÂTEAU D'EAU

Ingr Constructeur. Mr E. COIGNET

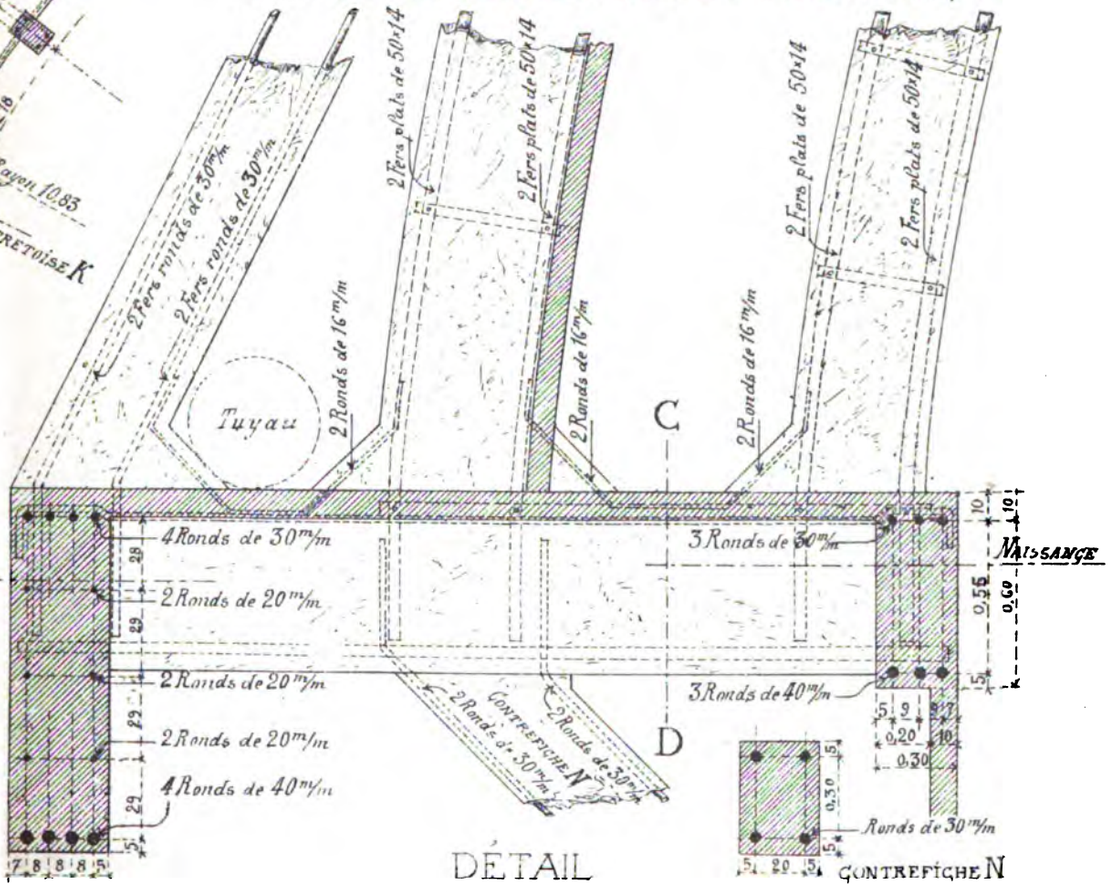
## ARC Nº 4




ARMATURES
5 APPUIS DE CHARPENTE
SUR LE GRAND ARC

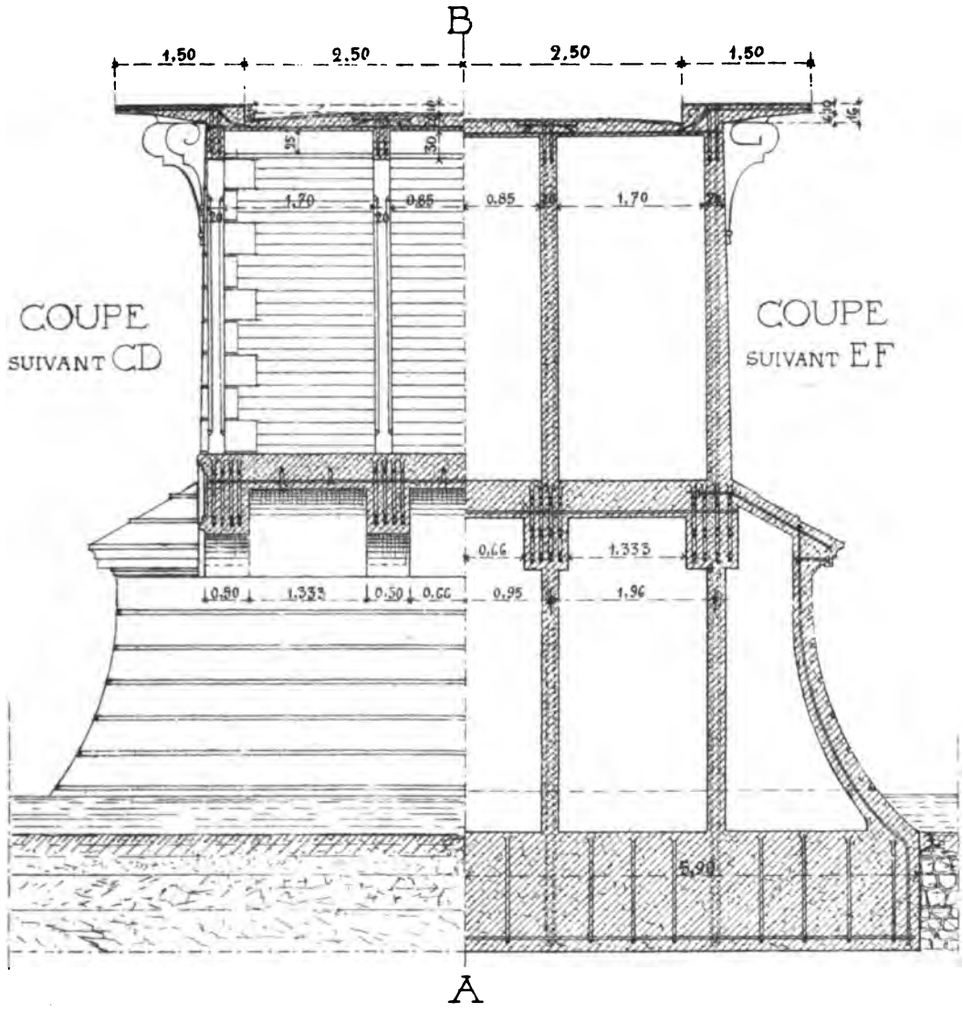


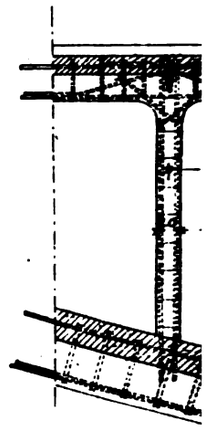

NOTA – Le Hourdis entre les Entretoises et les Arcs est armé de Ronds de 10 m/m espacés de 10 cm.




DÉTAIL
DE LA RETOMBÉE DE L'ARC Nº 2
CONTREFICHE N

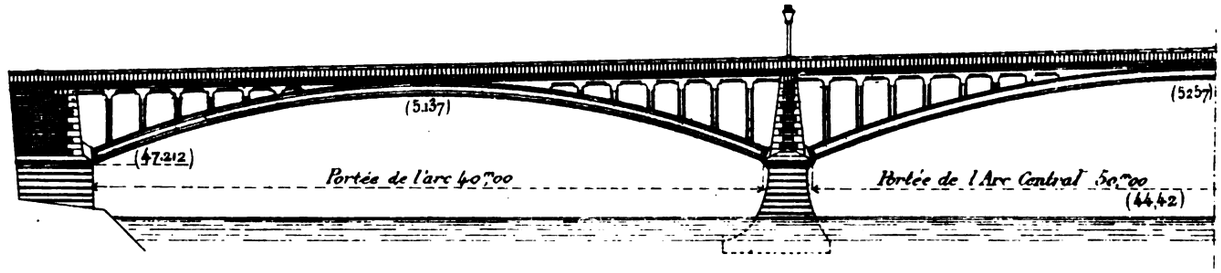
# PONT SUR LA VIENNE

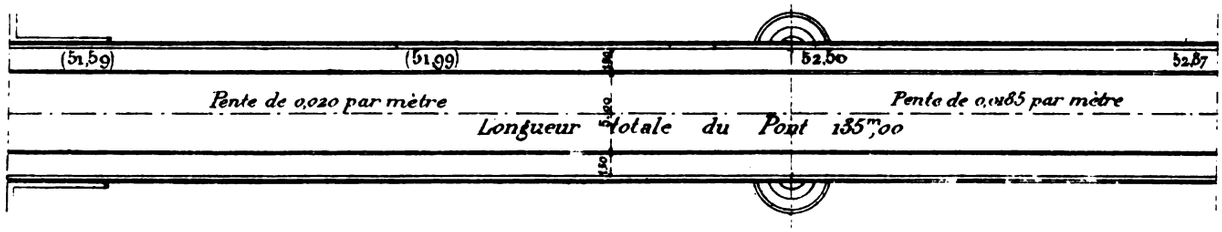


COUPE
SUR L'AXE AB

## DEMIE-ÉLÉVATION GÉNÉRALE



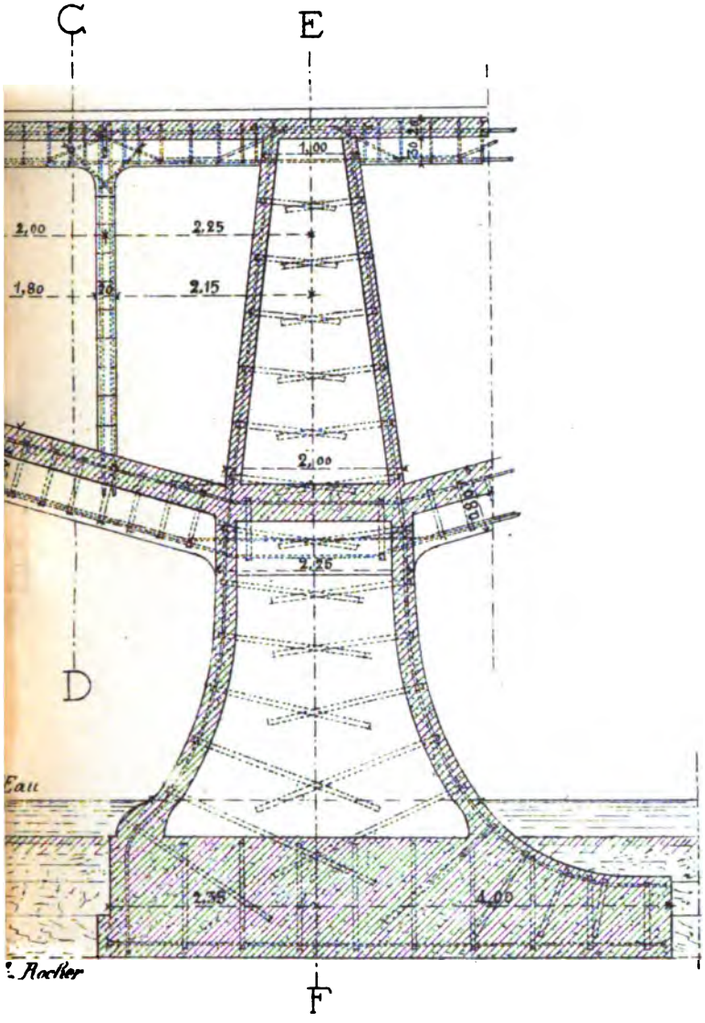




## DEMI-PLAN D'ENSEMBLE

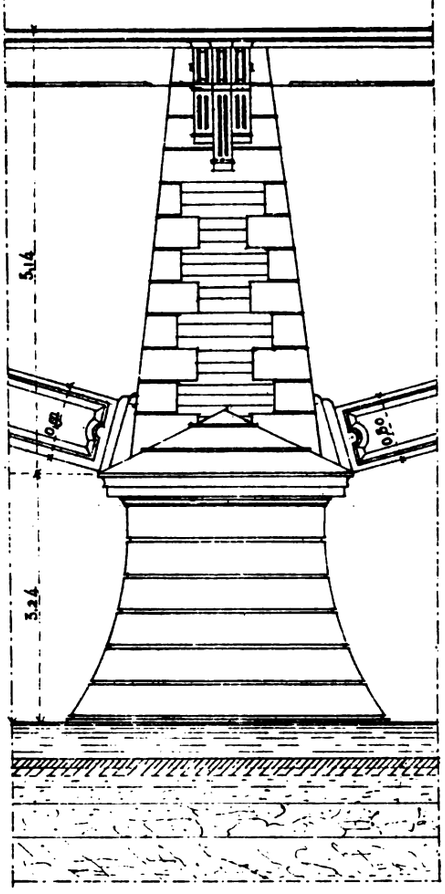
Berger et Guillerme-CIMENT ARMÉ – Vve Dunod-Editeur

# CHATELLERAULT

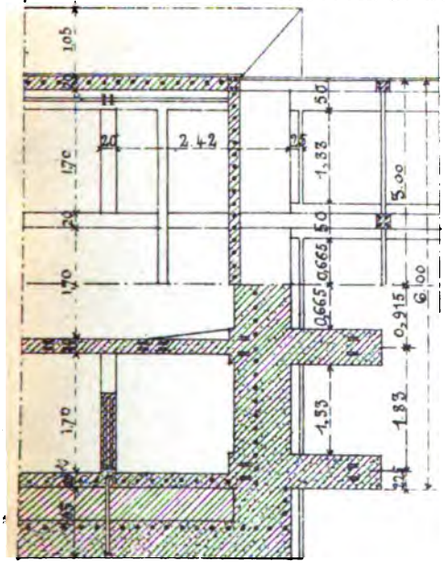
*Ingr Constructeur* : Mr HENNEBIQUE



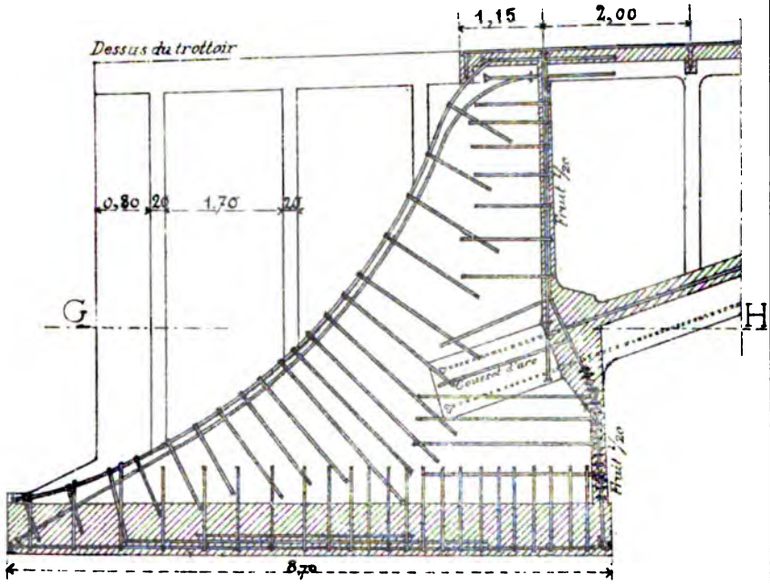

ÉLÉVATION D'UNE PILE




DEMI-PLAN TROTTOIR ET TABLIER ENLEVÉS



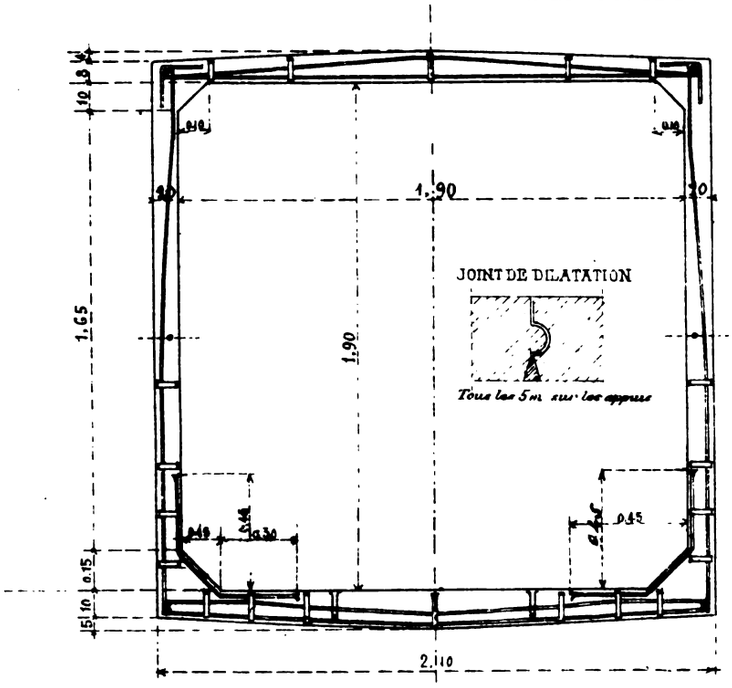

COUPE
SUIVANT GH

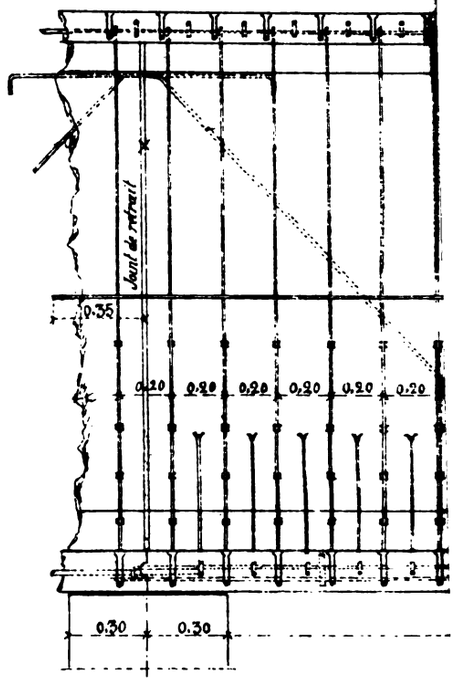



ARMATURE DES CONTREFORTS
DU MUR DE TÊTE

**Planche X.**

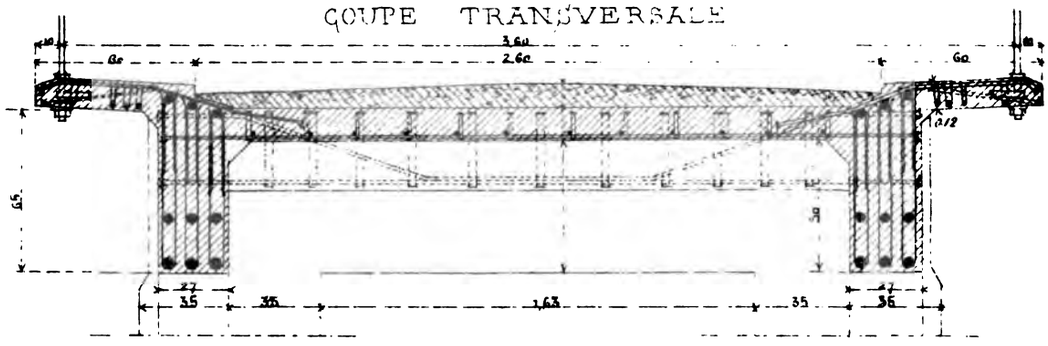
## PERCEMENT DU TUNNEL DU SIMP

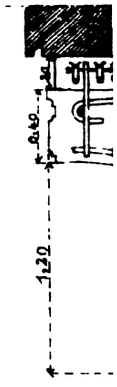


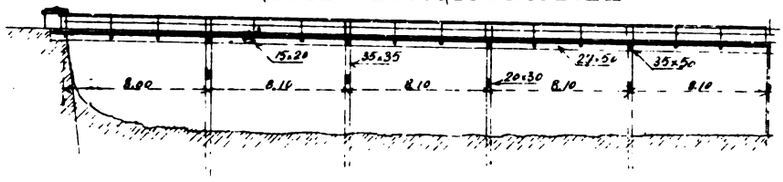

## RECONSTRUCTION DU PONT NEUF SUR L'ARVE
### A REIGNIER (HAUTE-SAVOIE)

COUPE TRANSVERSALE

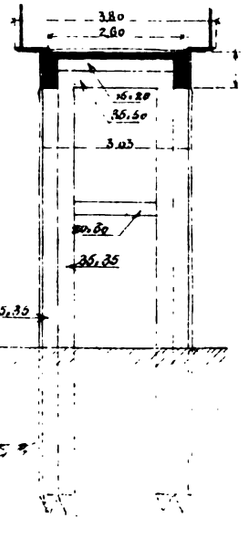


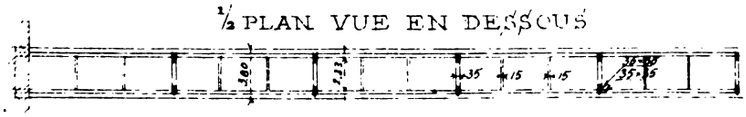
COUPE LONGITUDINALE



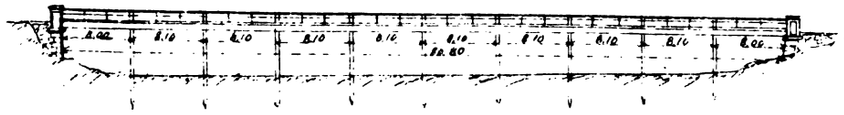

COUPE TRANSVERSALE



½ PLAN VUE EN DESSOUS



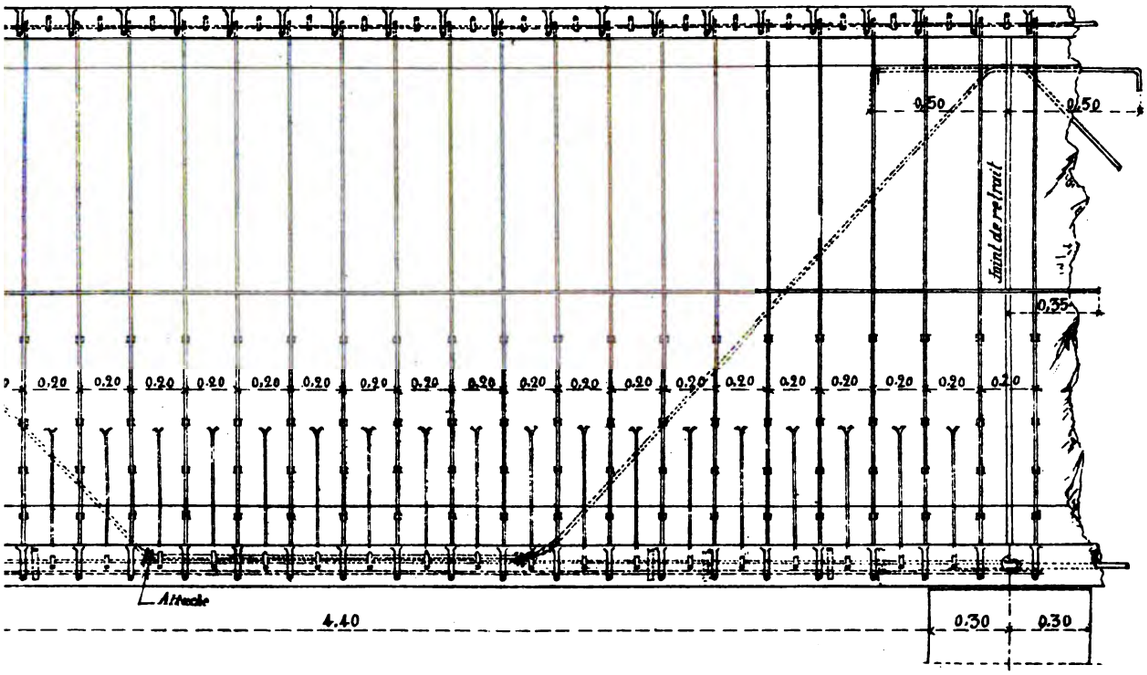
ÉLÉVATION D'ENSEMBLE



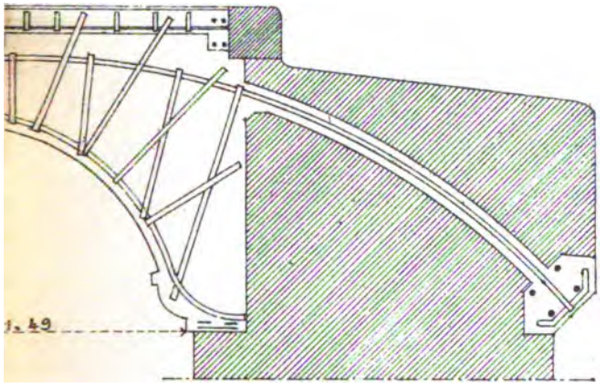
# DIVERS

*Ingénieur Constructeur :* Mr HENNEBIQUE

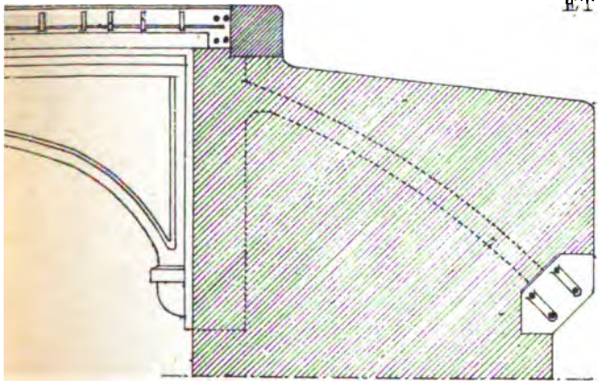
## ON - CANALISATION D'EAU




- COUPE SUR UNE CONSOLE




## HEMIN DE FER DE L'OUEST
### ENCORBEILLEMENT
COUPE SUR LE TROTTOIR



## TRANCHÉE DU QUAI DE BILLY
MUR DE SOUTÈNEMENT ET CONTREFORT

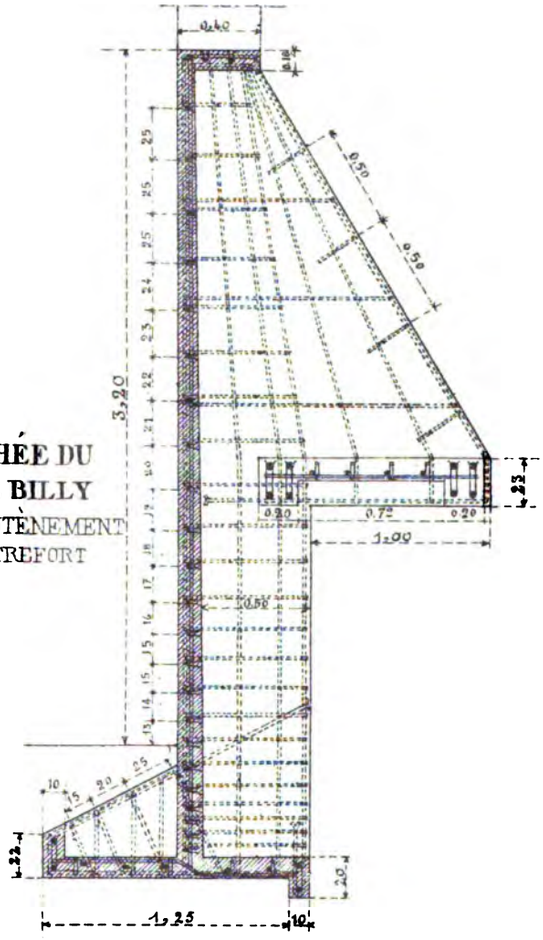
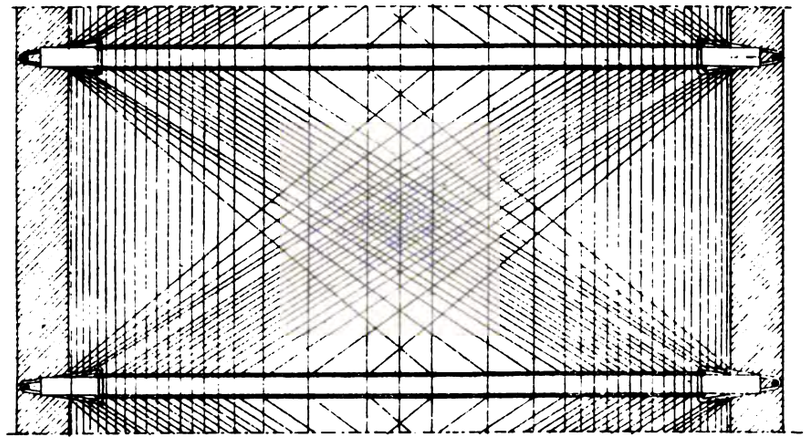
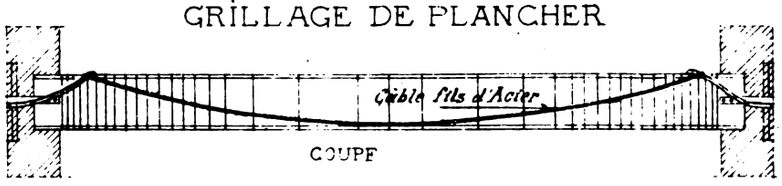
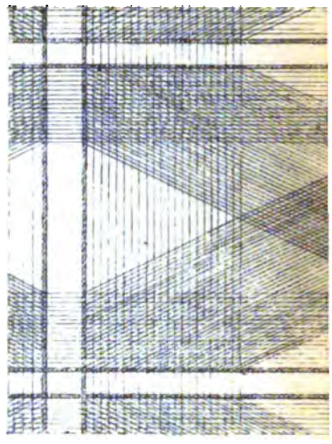


*Fig. 7.*

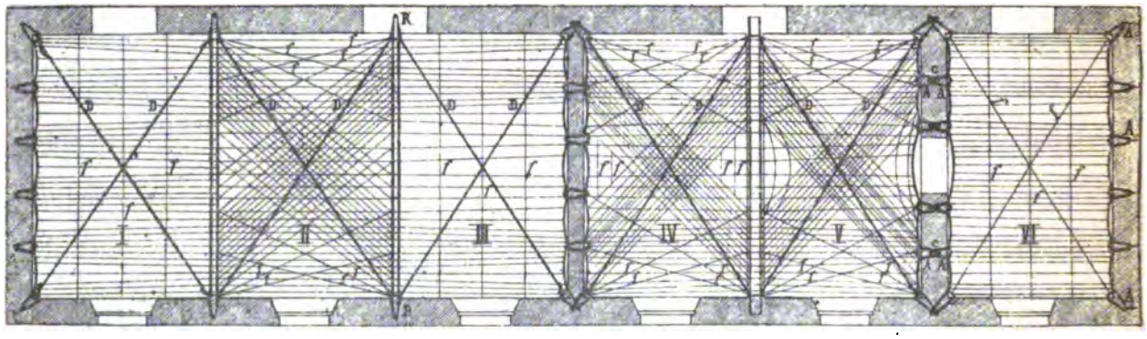


GRILLAGE DE PLANCHER

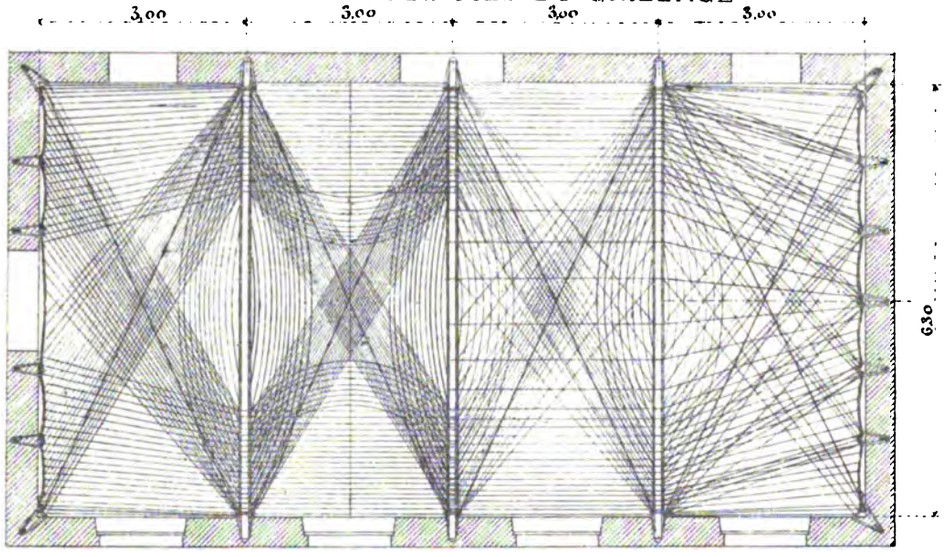


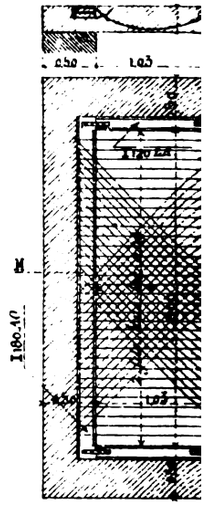
GRILLAG



DISPOSITIONS DIVERSES DES CÂBLES DIAGONAUX
ET DES FILS DU GRILLAGE

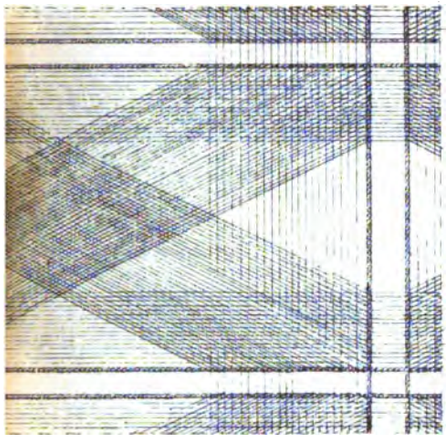


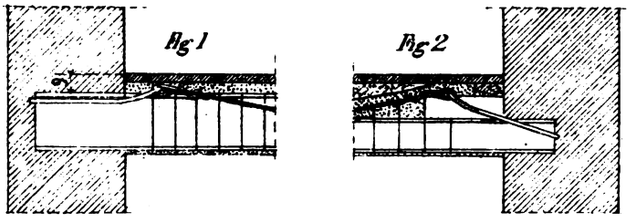

COUPE SUR M

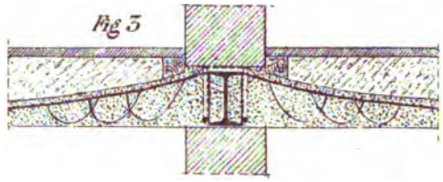


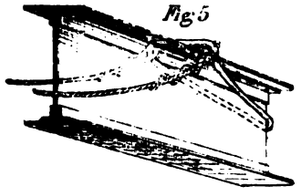
PLANCHER
CHEMIN DE FER

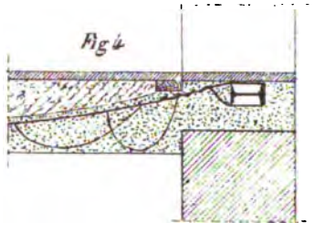
*Fig. 8.*






DE PLANCHER

COUPE E

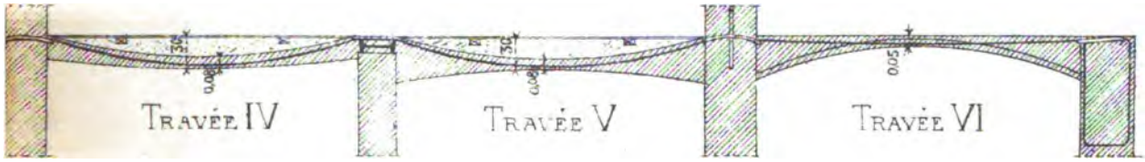
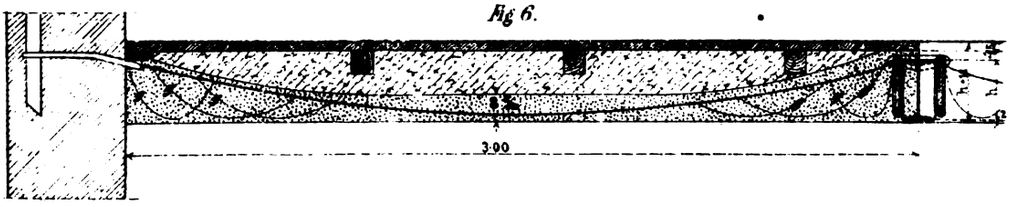
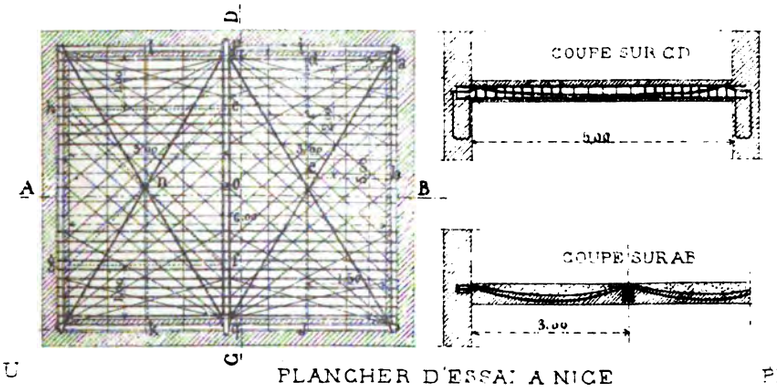
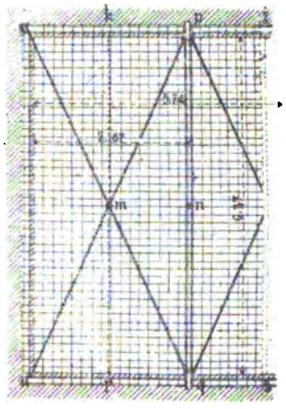



*Fig 6.*





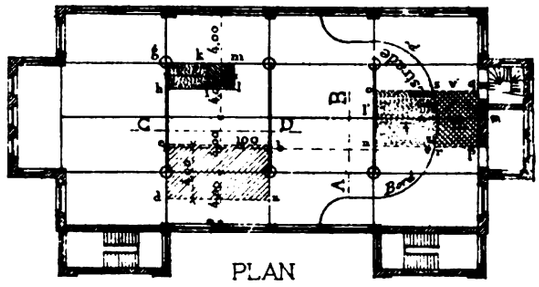



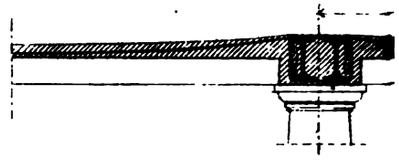
SSAI AU
TROPOLITAIN

PLANCHER D'ESSAI A NICE

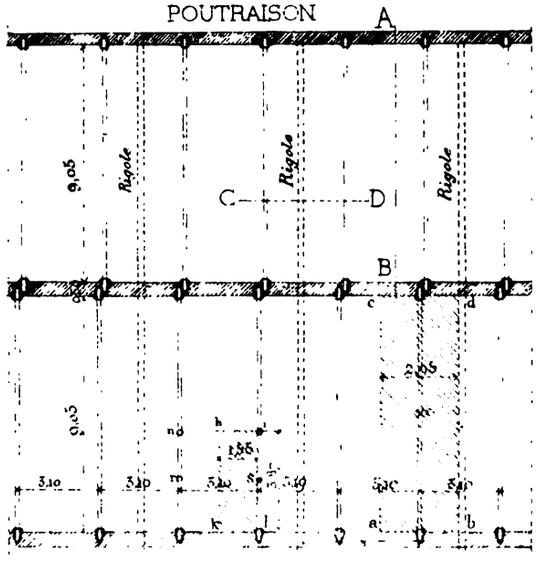
PLANCHER D'ESSAI A EDIMBOURG

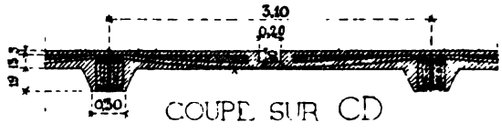
## MAISON D'ÉD



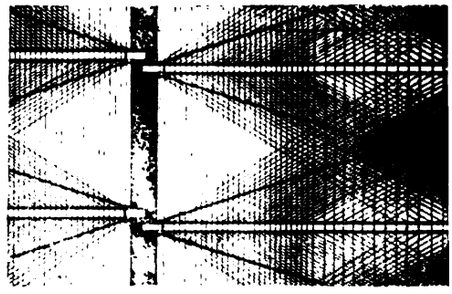



## PLANCHER DES USINES A-



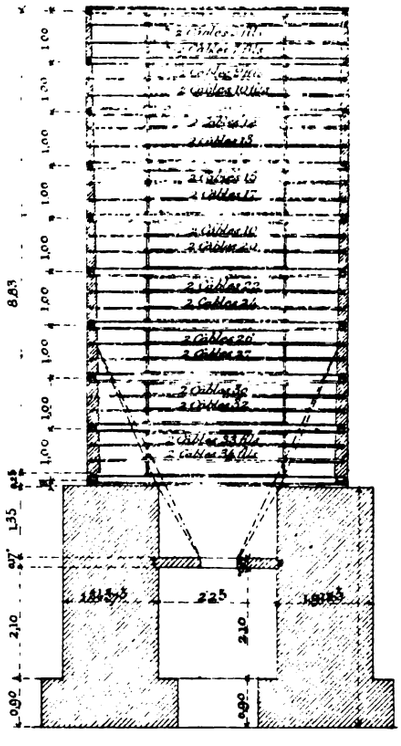




GRILLAGE DU HOUF

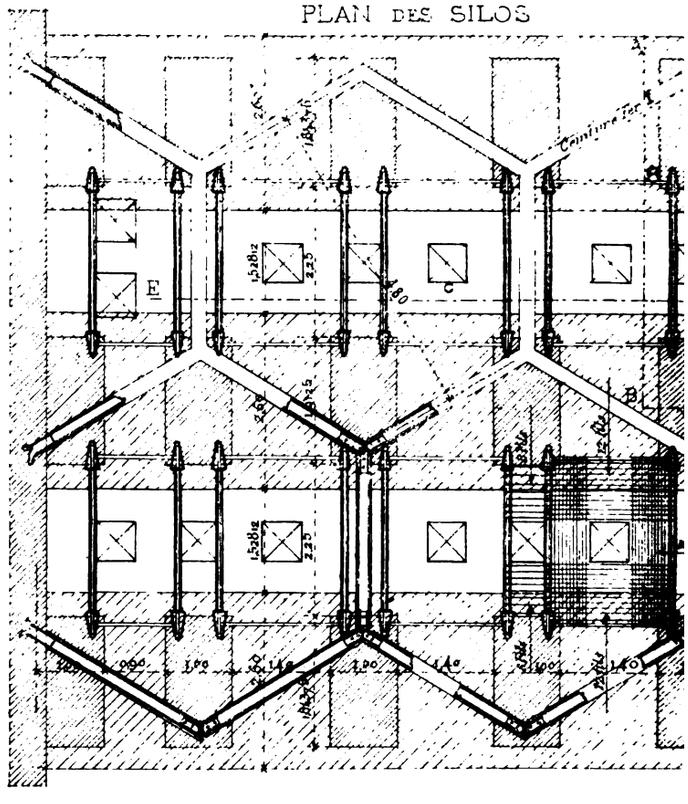


## SILOS DE L'USINE DE CHANTEMELLE

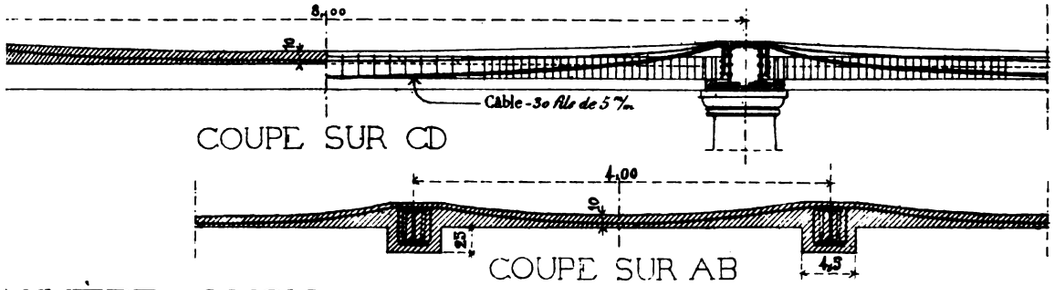
COUPE SUIVANT AB



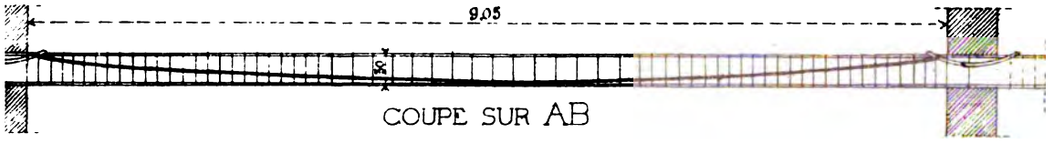

PLAN DES SILOS



## UCATION DE LA LÉGION D'HONNEUR A St DENIS

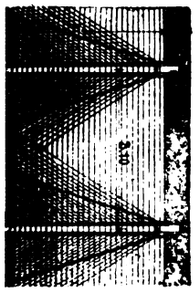



## LUMIÈRE A LYON

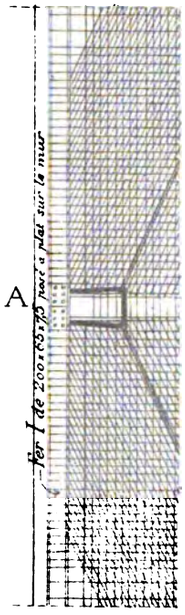



MAISON D'ÉDUCATION DE LA LÉGION D'HONNEUR

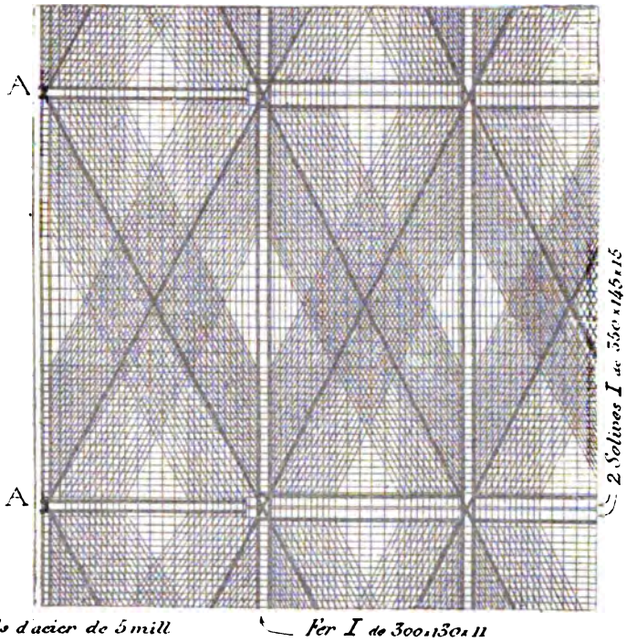
DIS

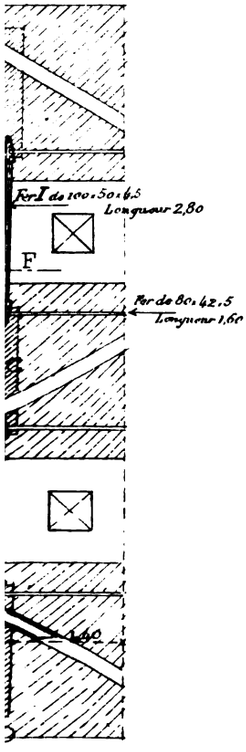


ATTACHE EN A

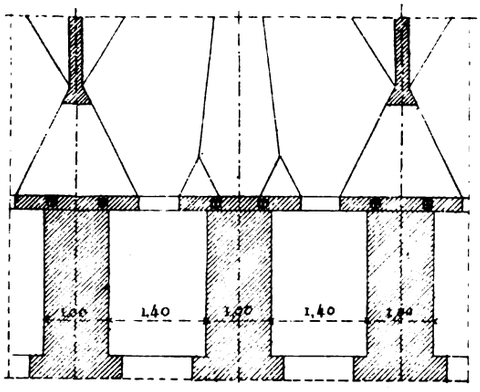



PLAN DU HOURDIS

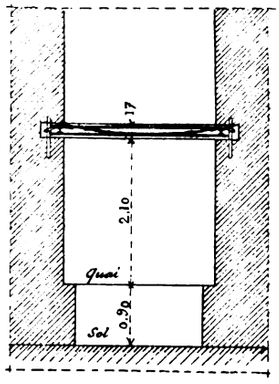



COUPE DES SILOS SUIVANT EF

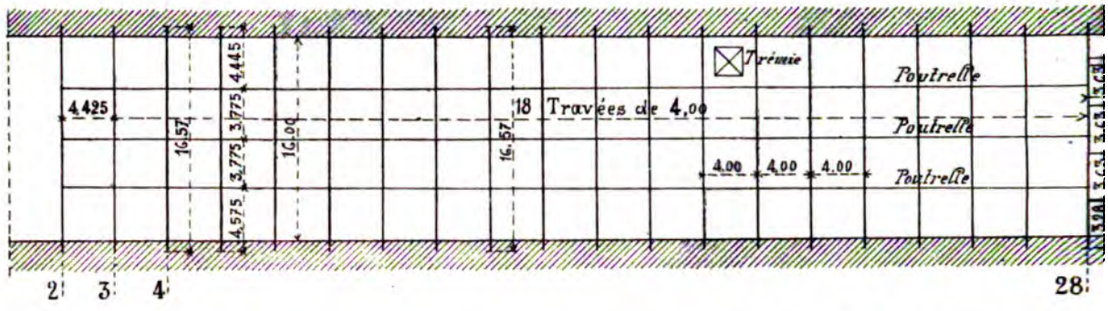



COUPE SUIVANT CD

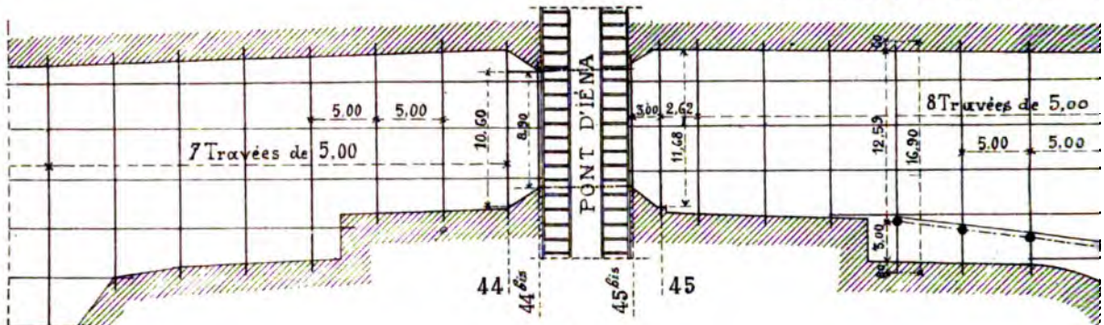


# COUVERTURE DE LA TRANCHÉE D

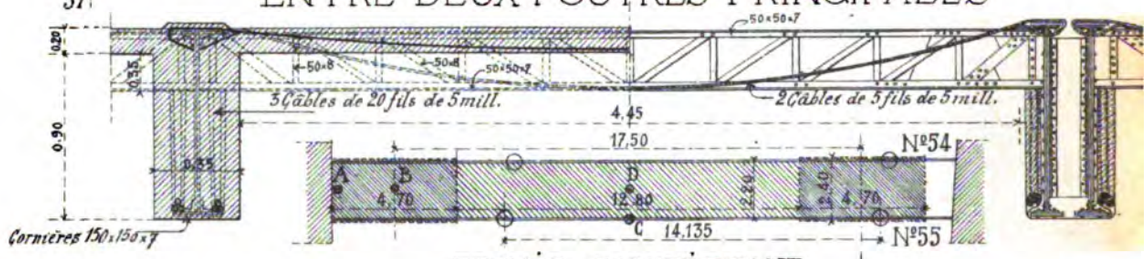
PLAN DE LA




PLAN DE LA

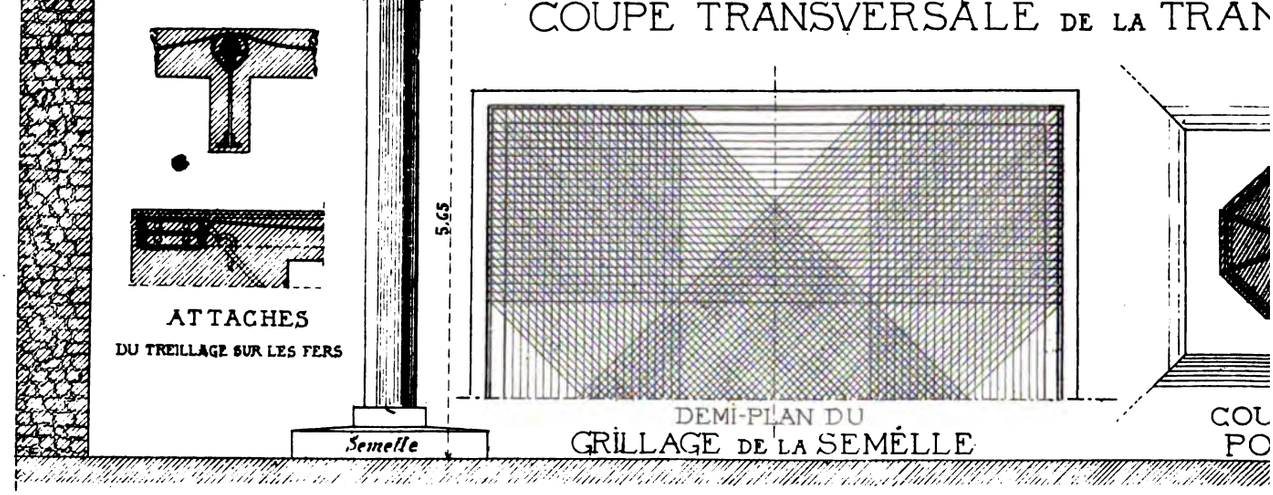



COUPE
ENTRE DEUX POUTRES PRINCIPALES




TRAVÉE D'EXPÉRIENCE

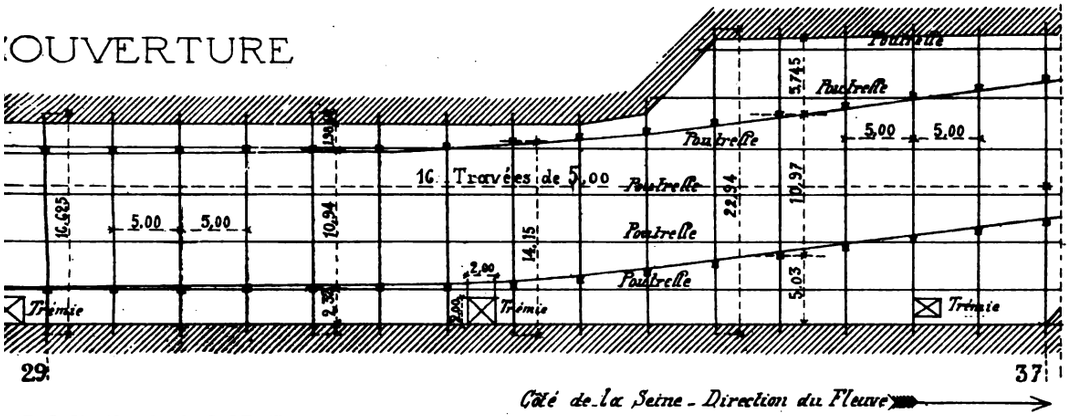
COUPE TRANSVERSALE DE LA TRAN



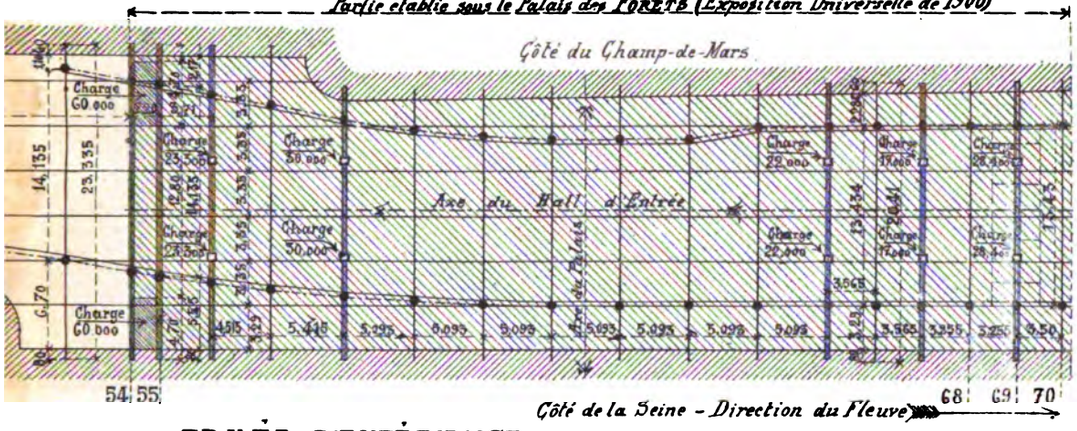
# CHEMIN DE FER DES MOULINEAUX

*En fer-béton – Système* MATRAI

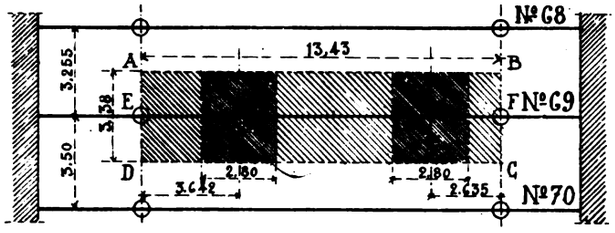
## COUPE OUVERTURE



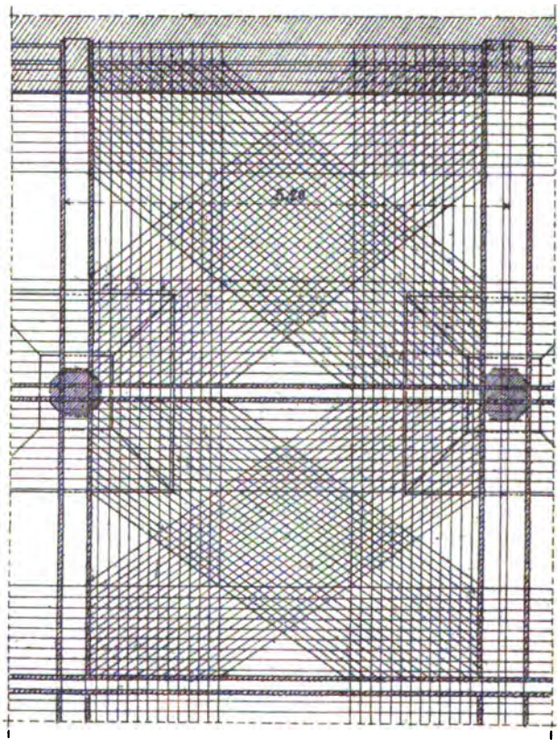

## COUPE OUVERTURE

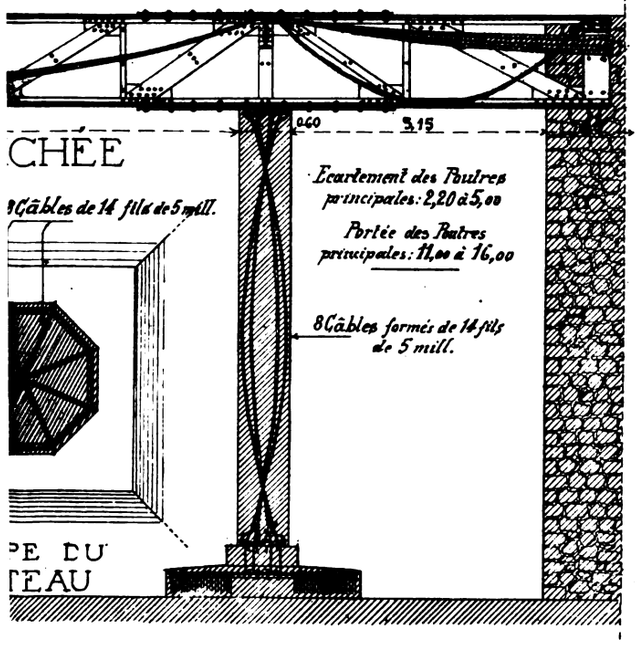


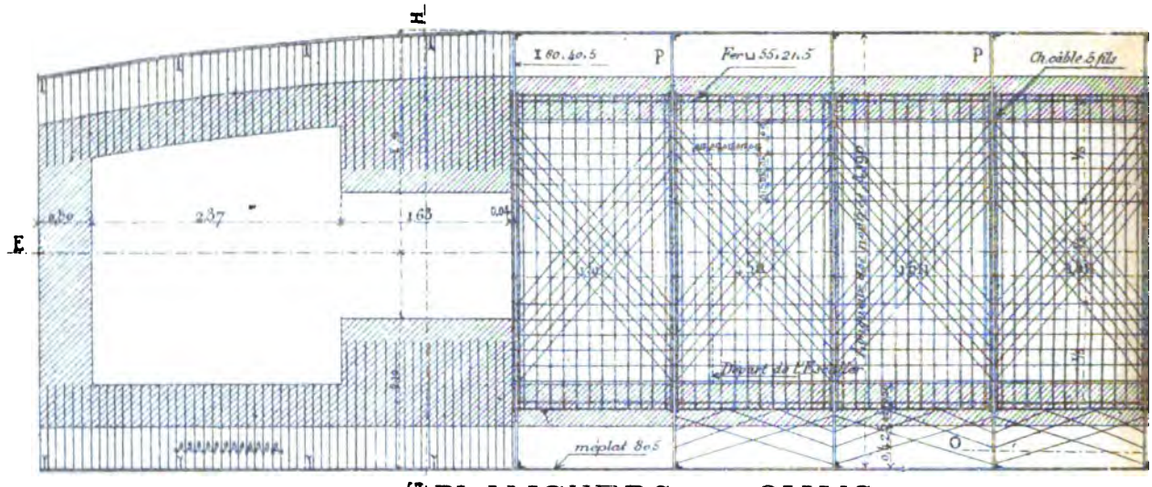

## TRAVÉE D'EXPÉRIENCE




## PLAN DU GRILLAGE ET DES CÂBLES

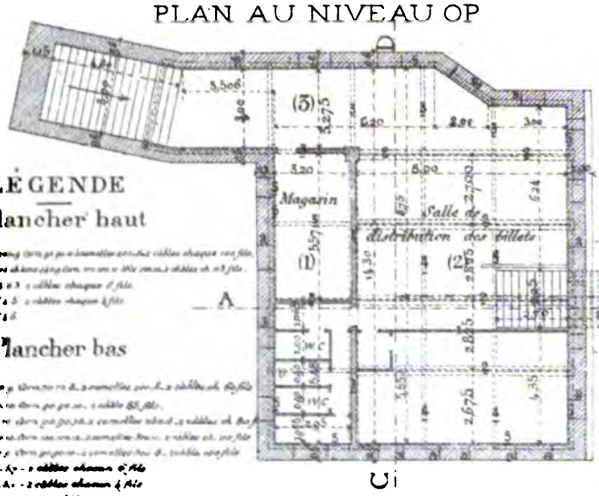







PLANCHERS DES QUAIS

PLAN AU NIVEAU OP




LÉGENDE

Plancher haut

Poutre n° 1 Ame en ciment armé de 0,20 d'épaisseur avec deux câbles chaque en 5 fils.
d° 2 à 4 mêmes dimensions que la n° 1 avec deux câbles chacun de 5 fils.
d° 5 de 0,40 de haut sur 0,15 d'épaisseur avec un câble chacun de 5 fils.
d° 6 de 0,40 de haut sur 0,15 d'épaisseur avec un câble chacun de 5 fils.
d° 7 de 0,40 de haut sur 0,15 d'épaisseur avec un câble chacun de 5 fils.

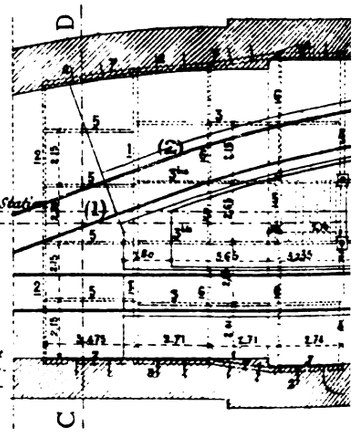
Plancher bas

Poutre n° 1 Ame en ciment armé de 0,20 d'épaisseur avec deux câbles de 5 fils.
d° n° 2 même dimension que la n° 1 avec deux câbles de 5 fils.
d° n° 3 Ame en ciment armé de 0,20 d'épaisseur avec deux câbles de 5 fils.
d° n° 3bis même dimension que la n° 3 avec deux câbles de 5 fils.
d° n° 4 Ame en ciment armé de 0,20 d'épaisseur avec deux câbles de 5 fils.
d° n° 5 même dimension que la n° 4 avec deux câbles chacun de 5 fils.
d° n° 6 même dimension que la n° 4 avec deux câbles chacun de 5 fils.
d° n° 7 même dimension que la n° 4 avec deux câbles.

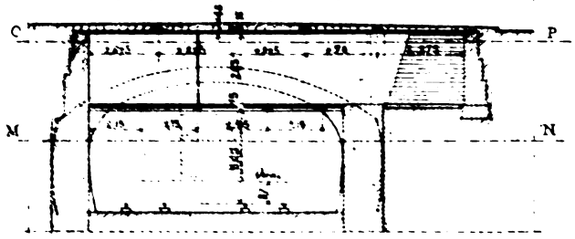
Note. Le fil de fer servant à maintenir les poutres couchettes sur les murs pendant la pose du grillage

PLAN AU NIVEAU

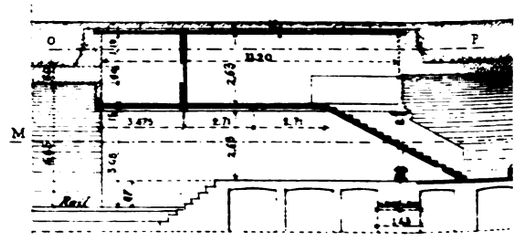
*(Voir la légende)*



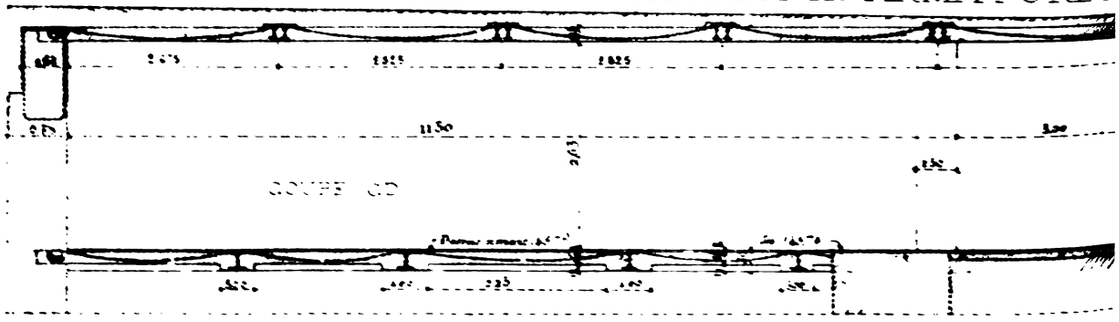

COUPE SUIVANT CD




COUPE SUIVANT AB

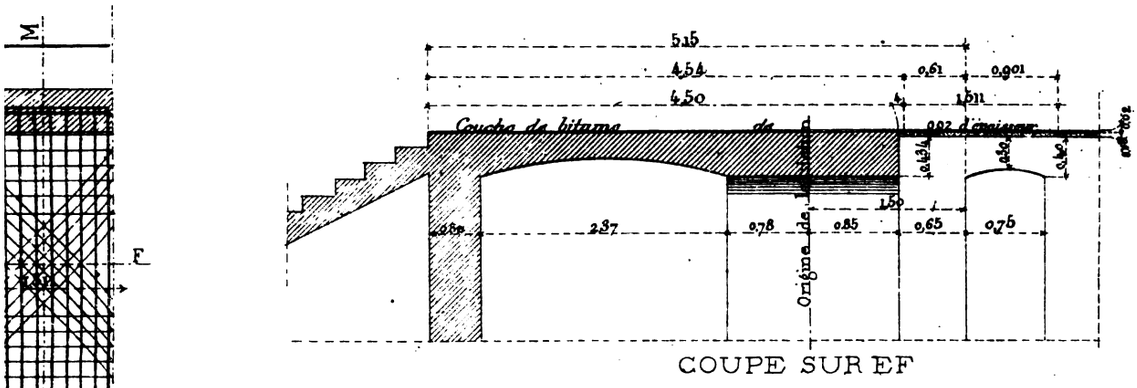


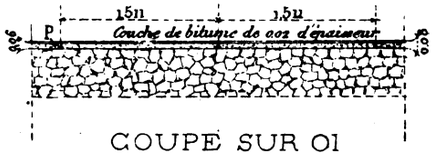

COUPES SUIVANT CD ET AB MONTRANT LES ARMATURES

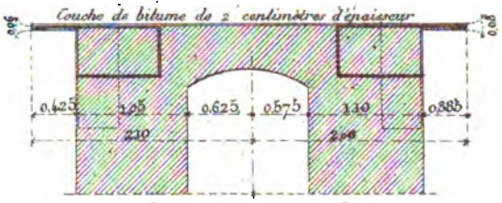


# J – STATION DE VINCENNES

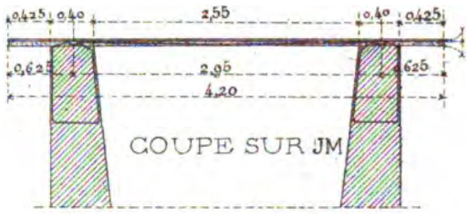
*En fer-béton* . Système MATRAI

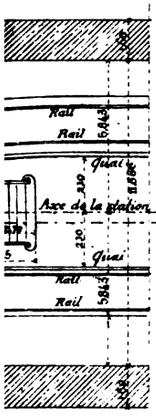


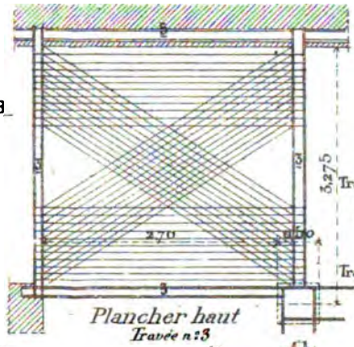




TN




**LÉGENDE**

Grillage du plancher haut

Travée n°1 1 fil double tous les 0.15 au milieu un fil double tous les 0.30

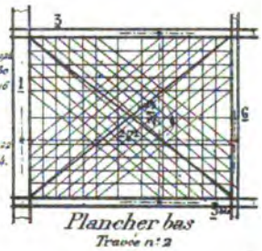
d: n°2 1 fil double tous les 0.15 au milieu un fil double tous les 0.30

d: n°3 1 fil double tous les 0.06 au milieu un fil double tous les 0.12

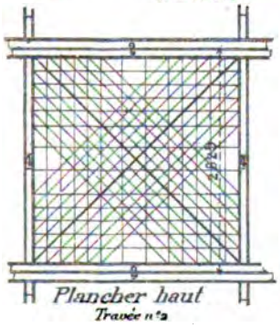
Grillage du plancher bas

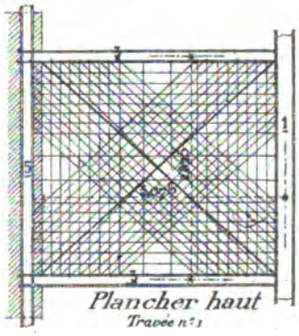
Travée n°1 1 fil double tous les 0.07 au milieu un fil double tous les 0.22

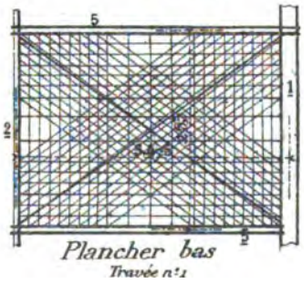
d: 2 fil double tous les 0.11 au milieu un fil double tous les 0.22




N



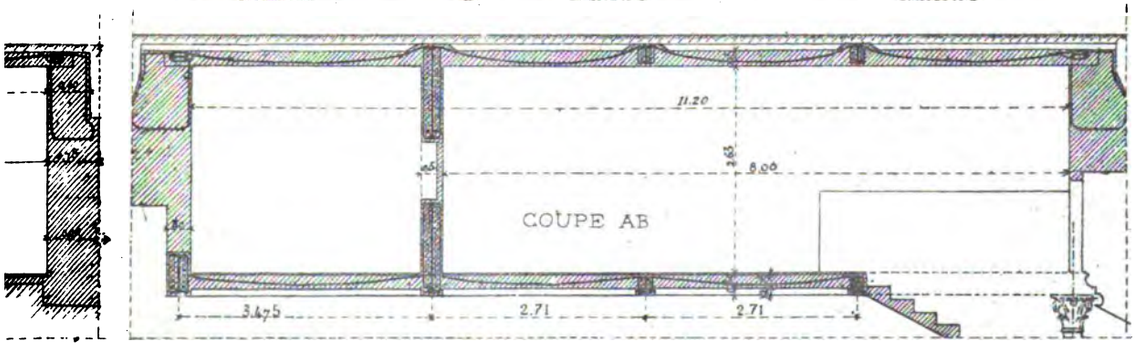
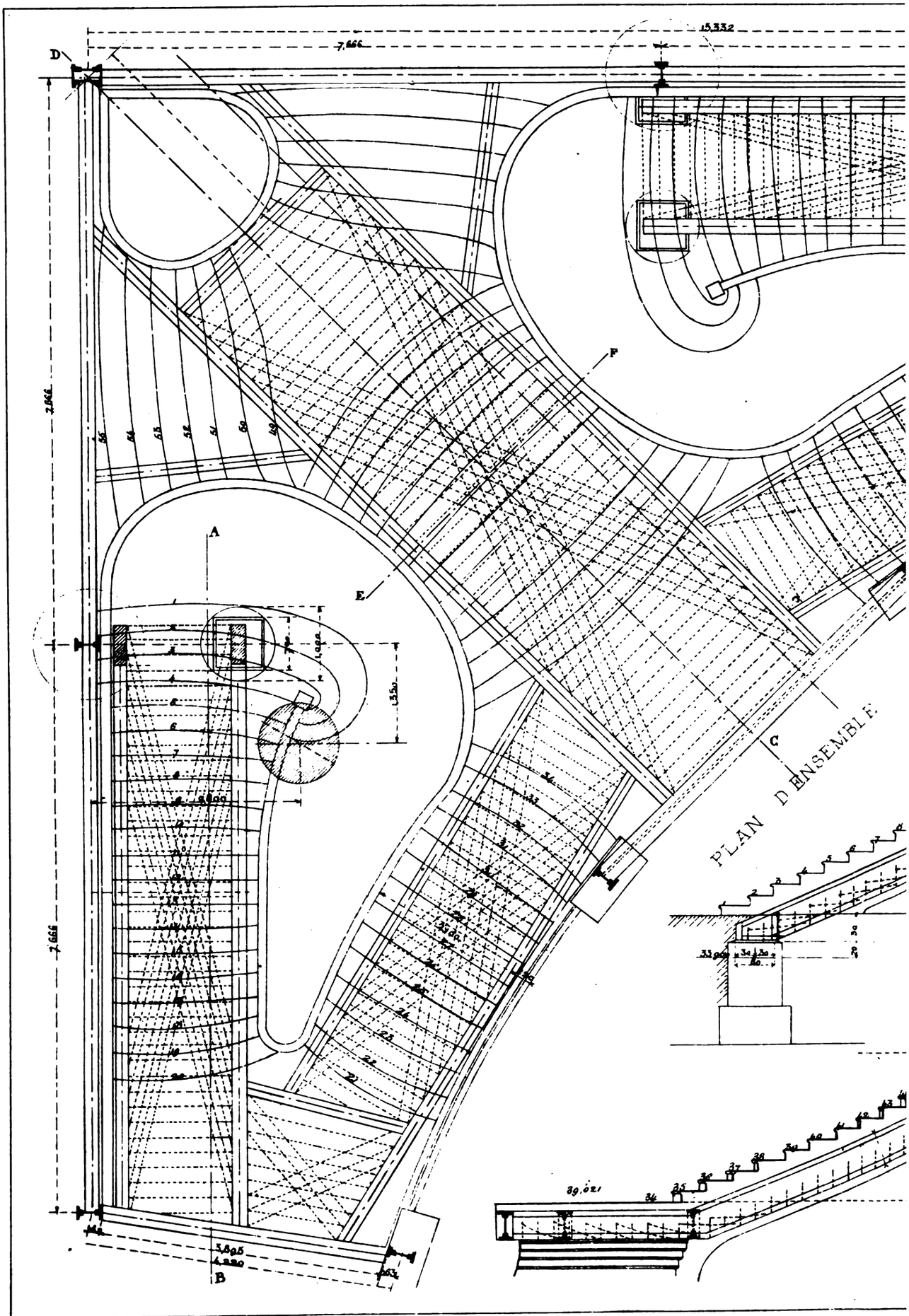




**Planche XV.**

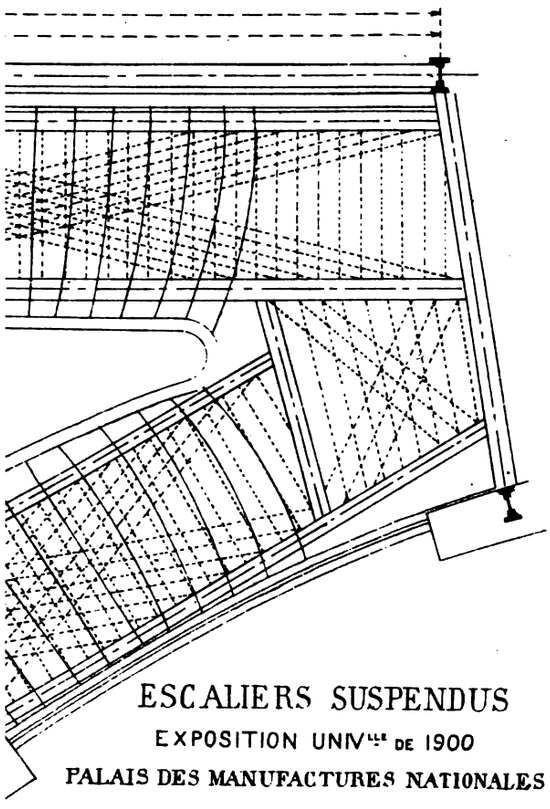
# ESCALIE




Berger et Guillerme. CIMENT ARME - Vve Dunod - Editeur

# RS-CUVE

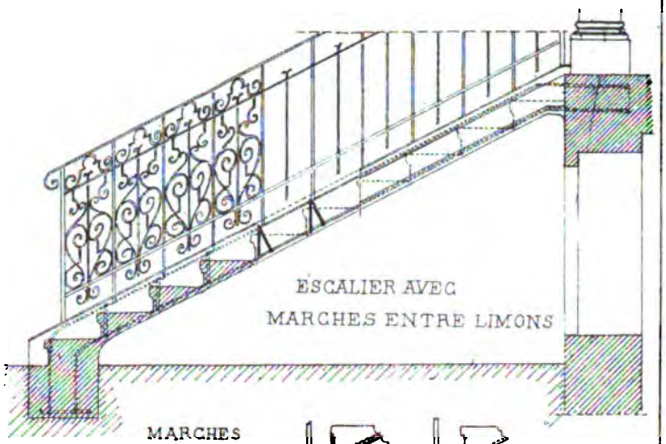
*En fer-béton* . Système MATRAI

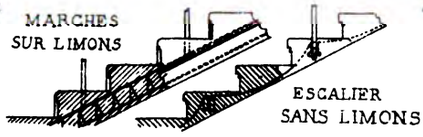


ESCALIERS SUSPENDUS

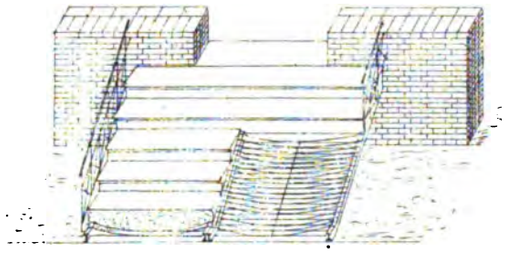
EXPOSITION UNIVLLE DE 1900

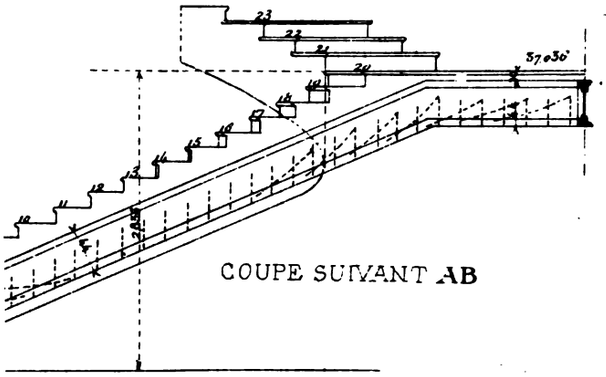
PALAIS DES MANUFACTURES NATIONALES




GRILLAGE DANS LES MARCHES

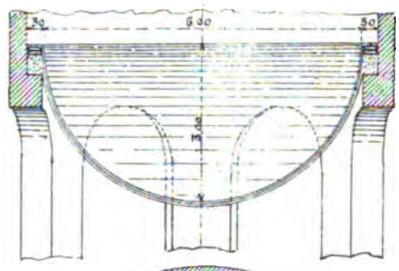




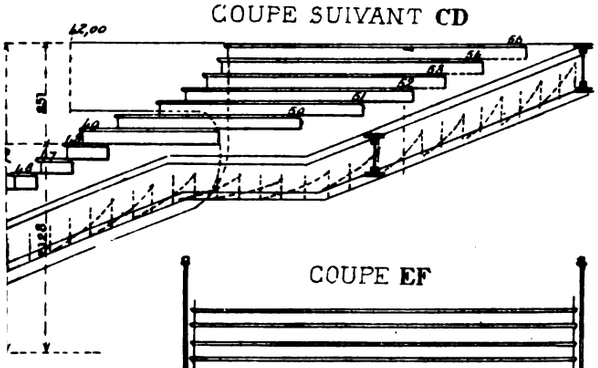

COUPE SUIVANT **AB**

**CUVE DE RÉSERVOIR**

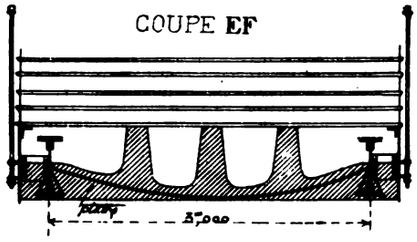
COUPE

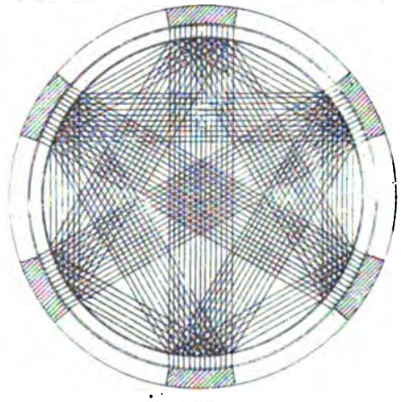


COUPE SUIVANT **CD**




COUPE **EF**

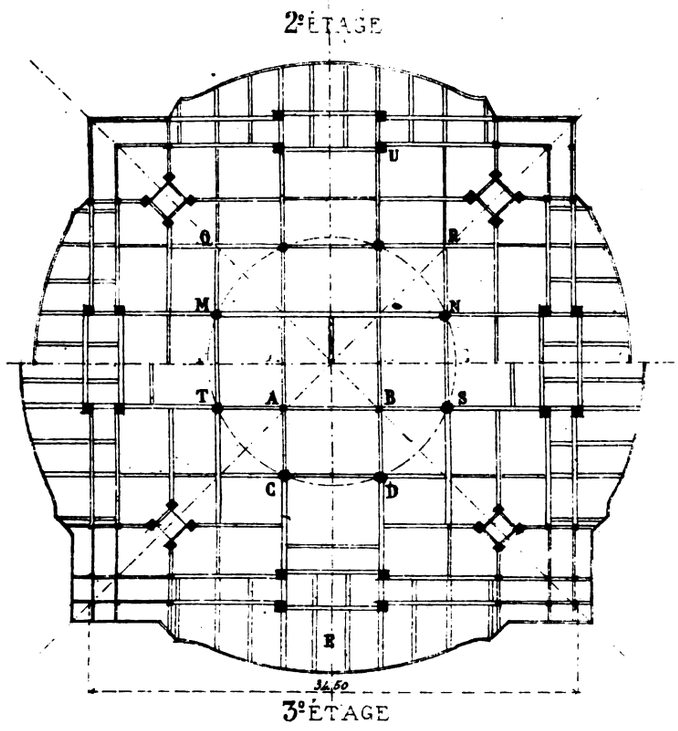


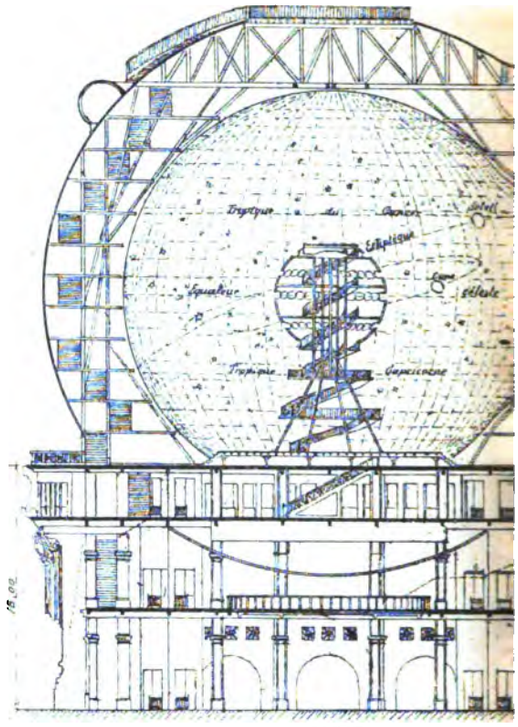



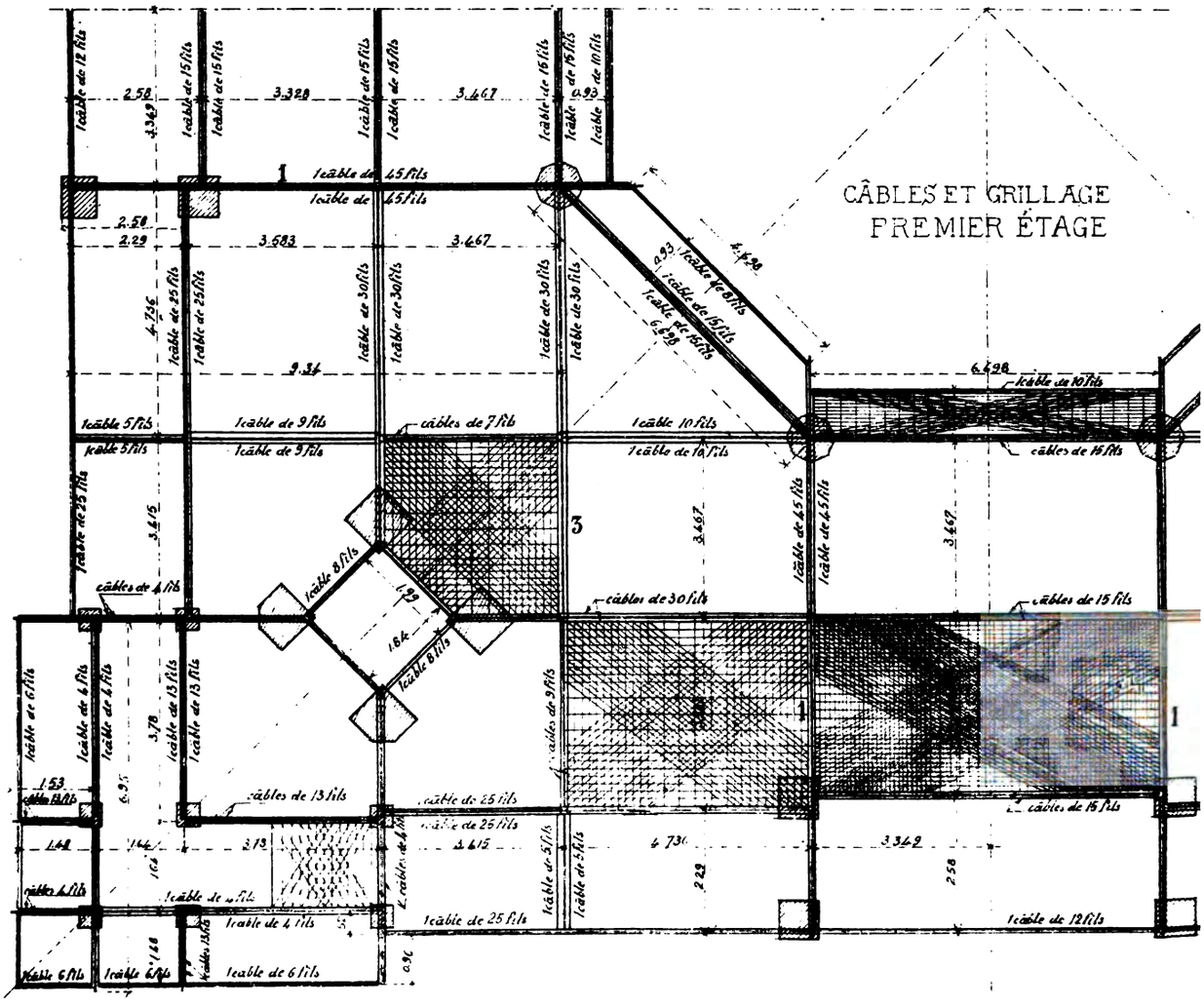
PLAN

**Planche XVI**

# GRAND GLOBE CÉLES

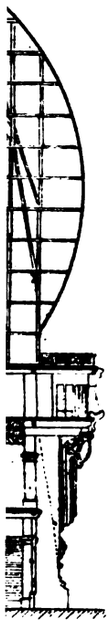



*Berger et Guillerme. CIMENT ARMÉ.* V^ve^ **Dunod**, Éditeur.

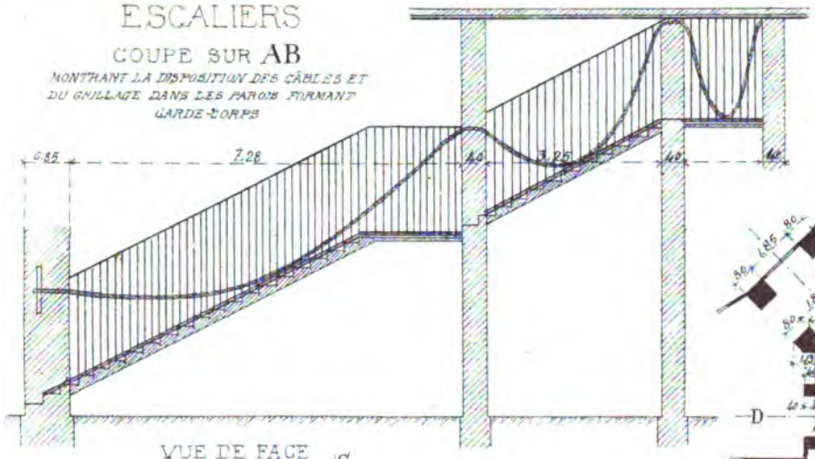
*Ingénieur-Constructeur :* Mr MATRAI

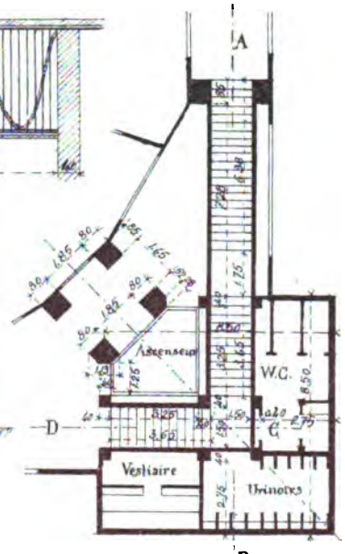


## ESCALIERS

COUPE SUR AB

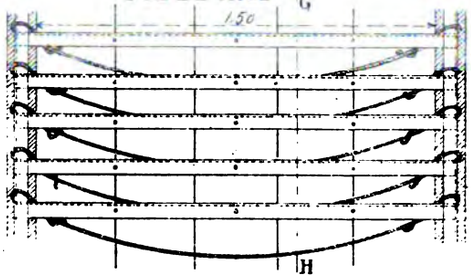
MONTRANT LA DISPOSITION DES CÂBLES ET DU GRILLAGE DANS LES PAROIS FORMANT GARDE-CORPS

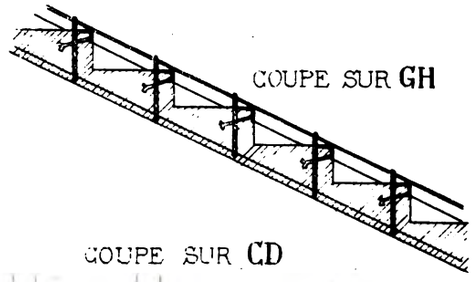


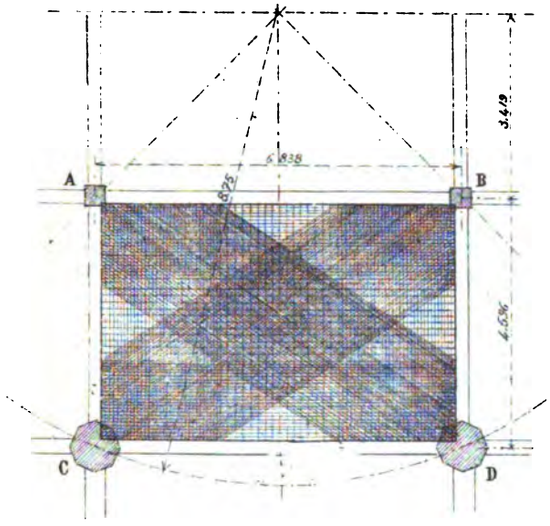

PLAN

VUE DE FACE G

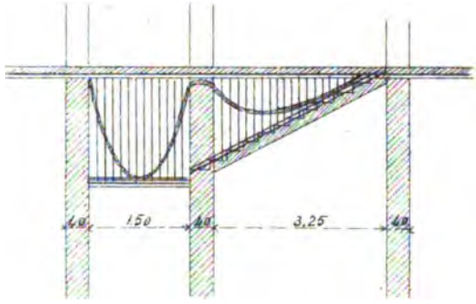


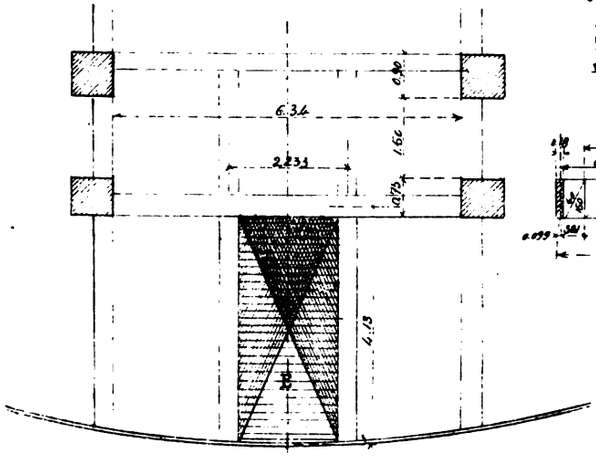
COUPE SUR GH

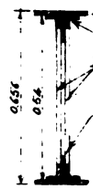



COUPE SUR CD




TROISIÈME ÉTAGE

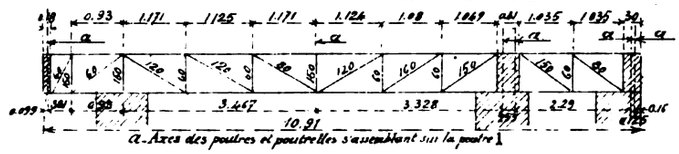



COUPE-POUTRE N°1

## TYPES DE POUTRES

POUTRE DU PREMIER ÉTAGE - N°1




a - Axes des poutres et poutrelles s'assemblant sur la poutre 1

POUTRE DU PREMIER ÉTAGE - N°3

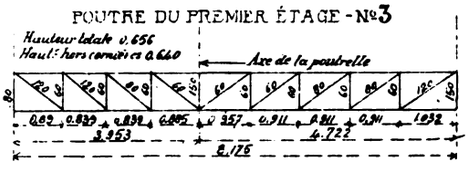
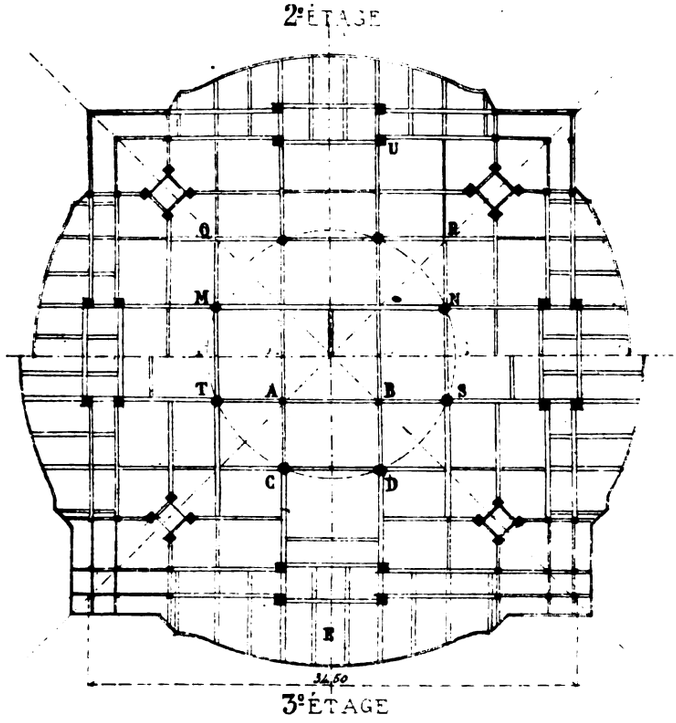
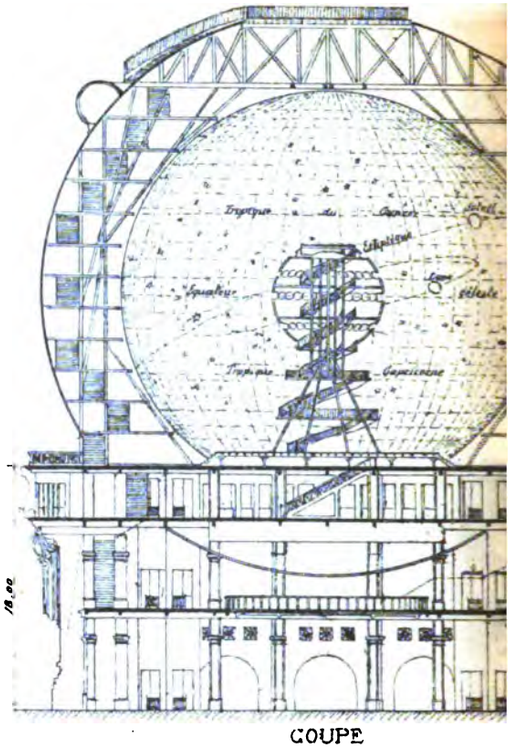
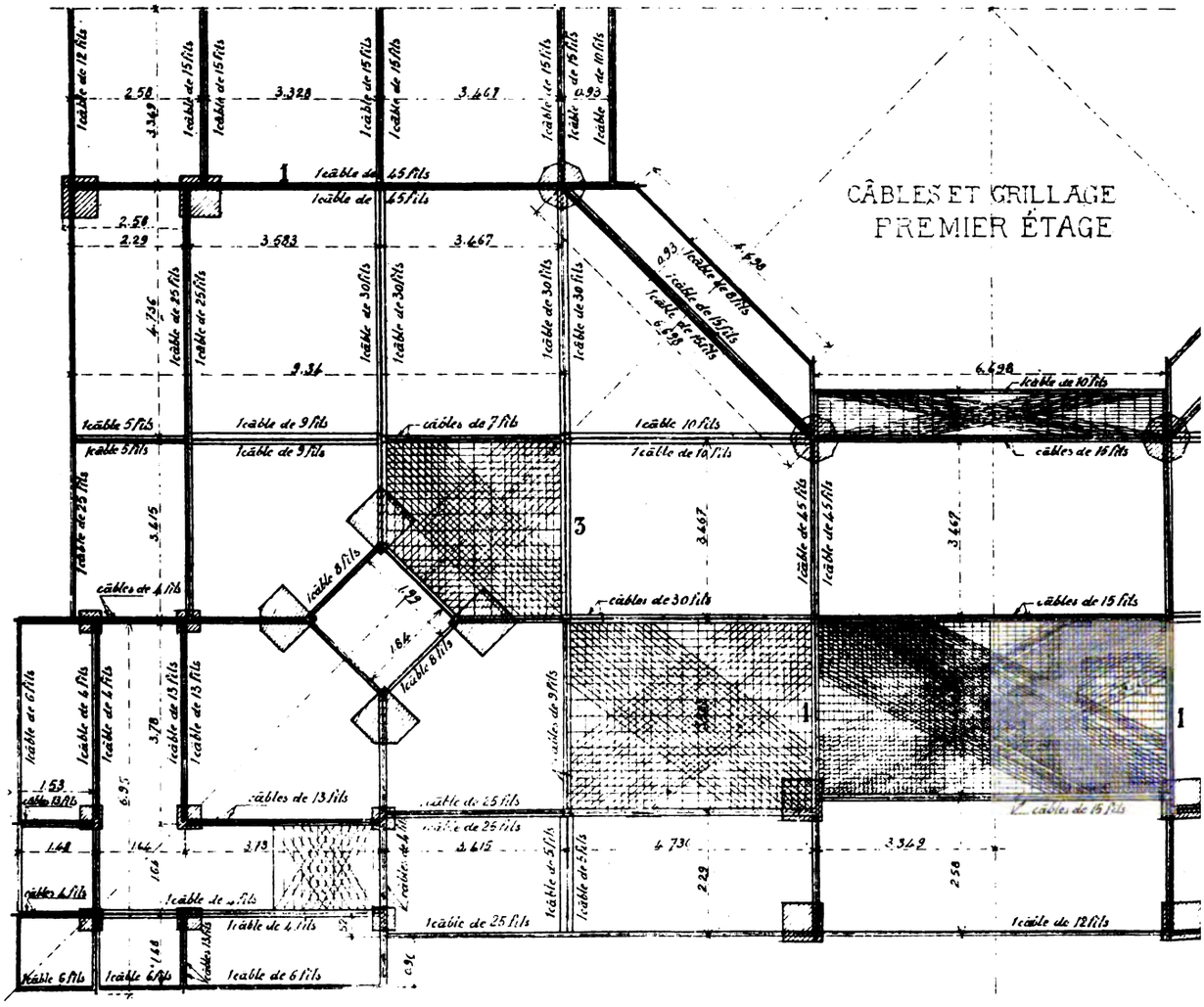



**Planche XVII.**

# GRAND GLOBE CÉLES



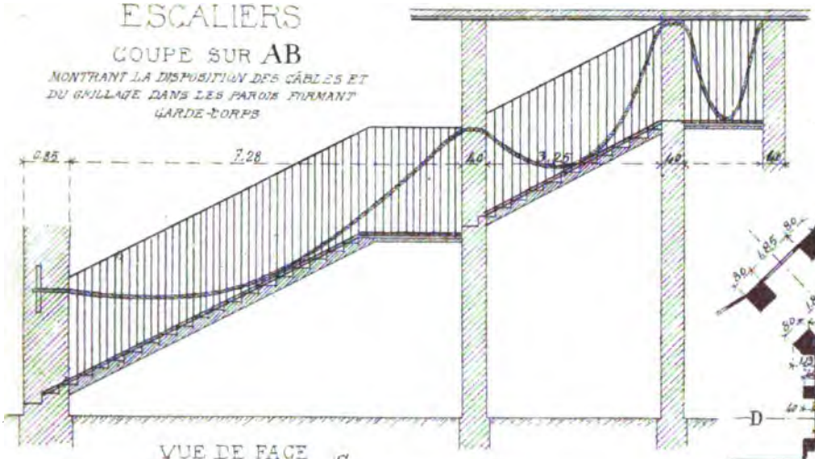



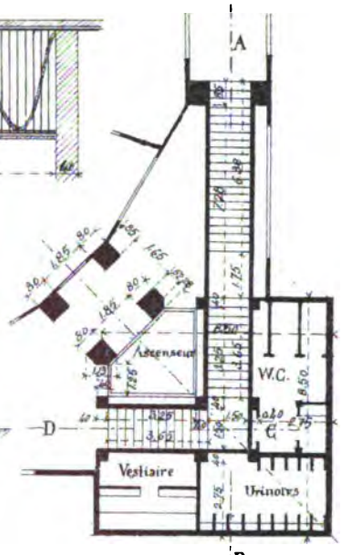
*Ingénieur-Constructeur :* Mr MATRAI

## ESCALIERS

COUPE SUR AB

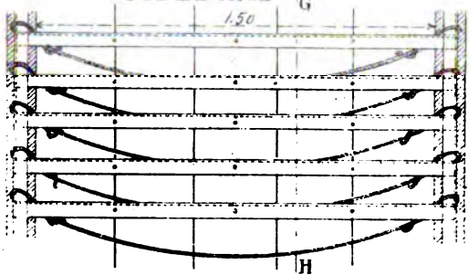
MONTRANT LA DISPOSITION DES CÂBLES ET DU GRILLAGE DANS LES PAROIS FORMANT GARDE-CORPS

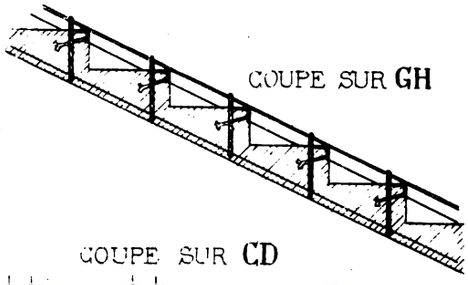




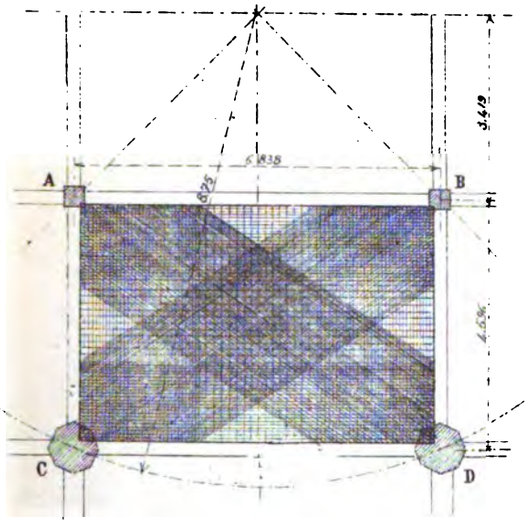

PLAN

VUE DE FACE



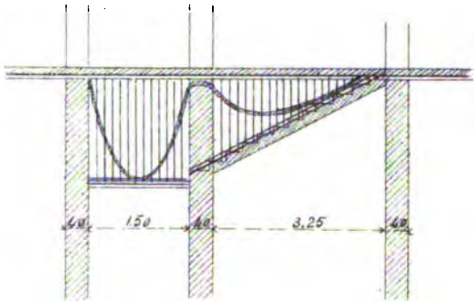



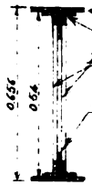
COUPE SUR GH




TROISIÈME ÉTAGE

COUPE SUR CD

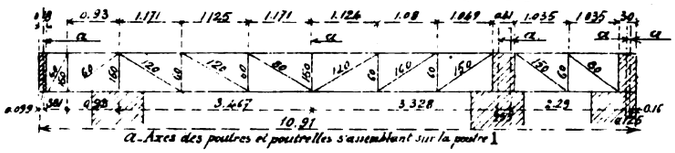



COUPE-POUTRE N°1

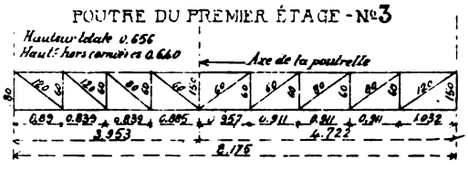
## TYPES DE POUTRES

POUTRE DU PREMIER ÉTAGE - N°1

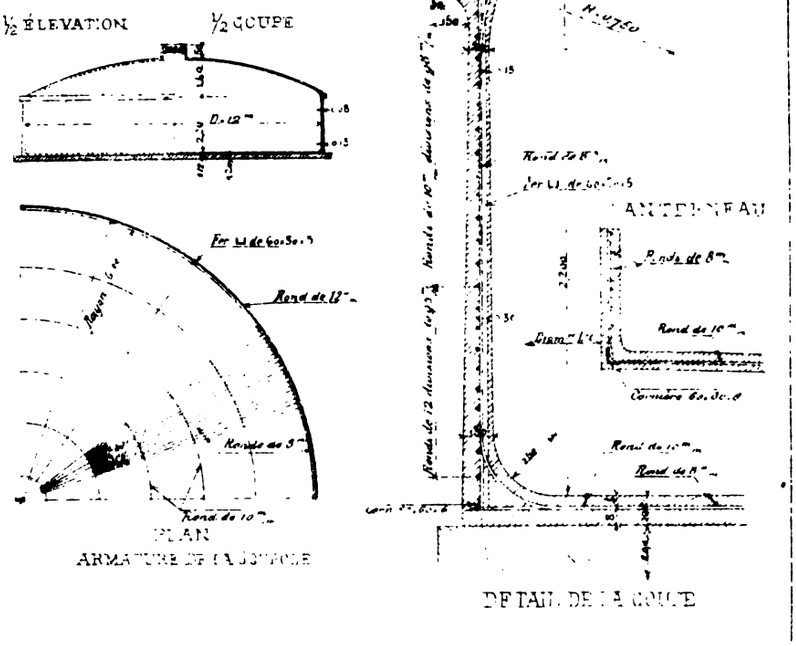


a - Axes des poutres et poutrelles s'assemblant sur la poutre 1

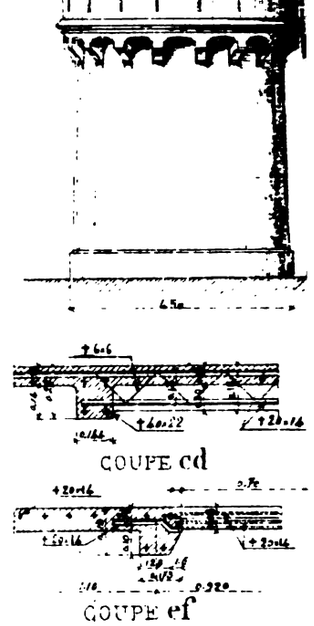
POUTRE DU PREMIER ÉTAGE - N°3



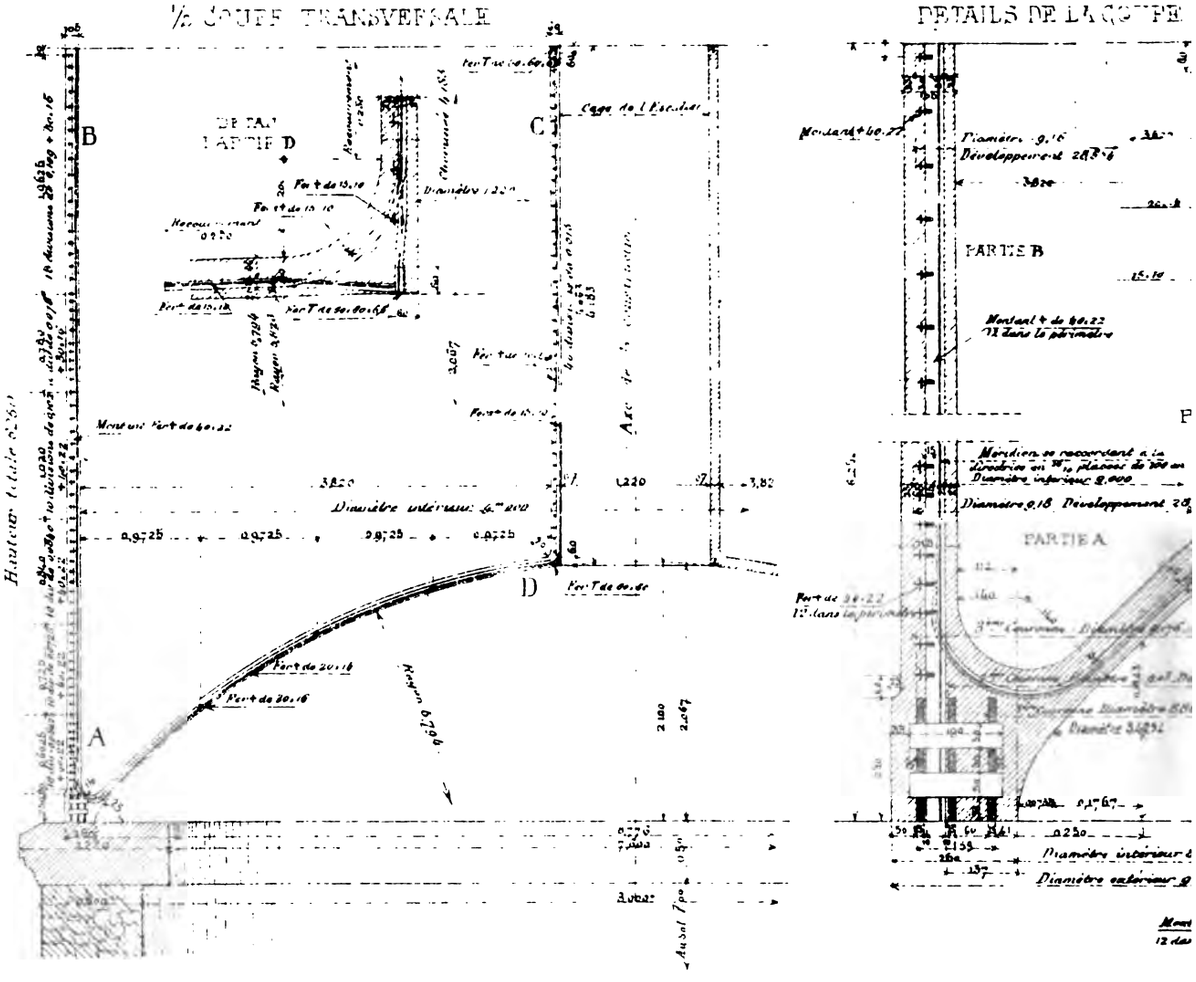
## RÉSERVOIR POUR LA COMMUNE DE PUISEUX-LES-LOUVRES




## RÉSERVOIR



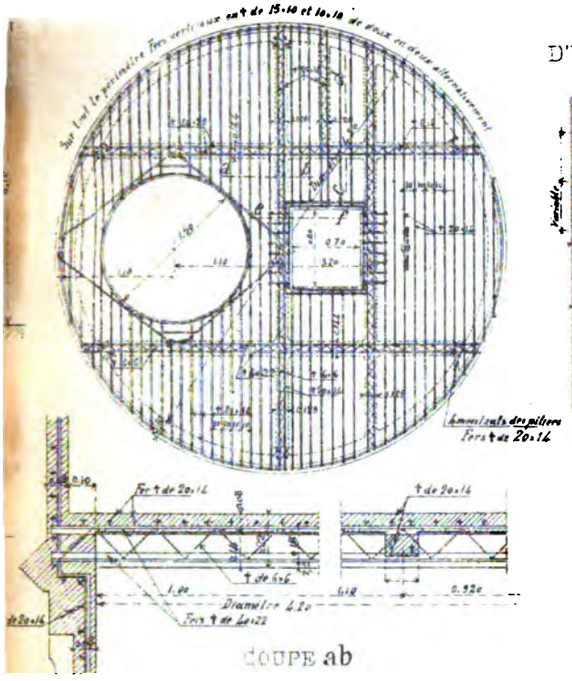

## RÉSERVOIR DE 150 M³ A ROCHEF



Ingénieur-Constructeur : M^r A. BONNA

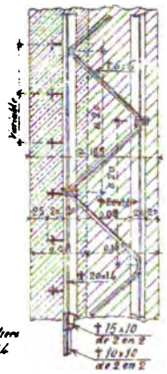
# ÉQUILIBRE DE GENNEVILLIERS SUR LA CONDUITE D'ACHÈRES

## ARMATURES DU PLANCHER HAUT

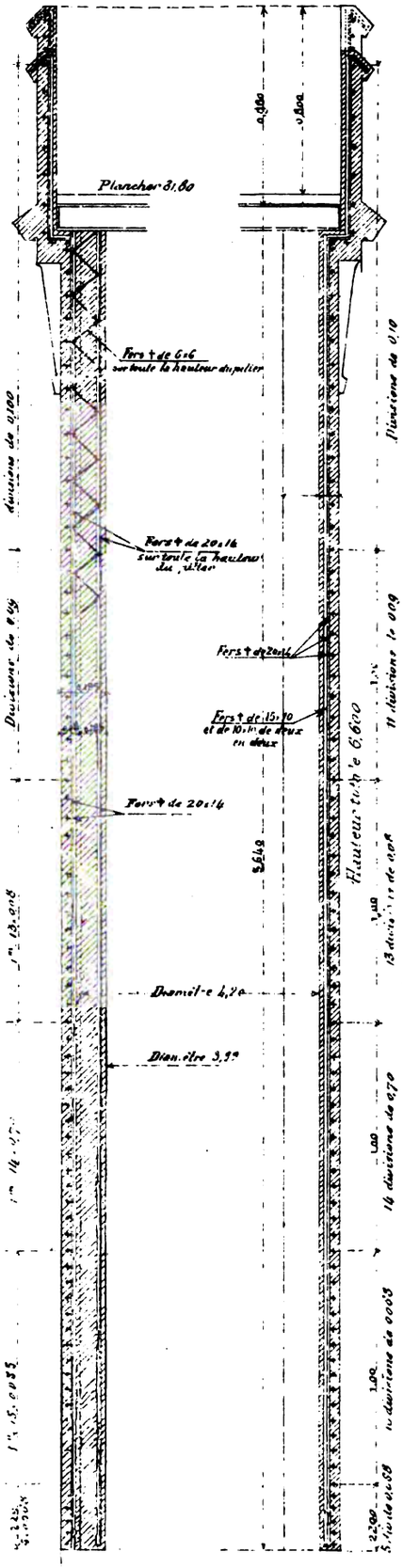


COUPE ab

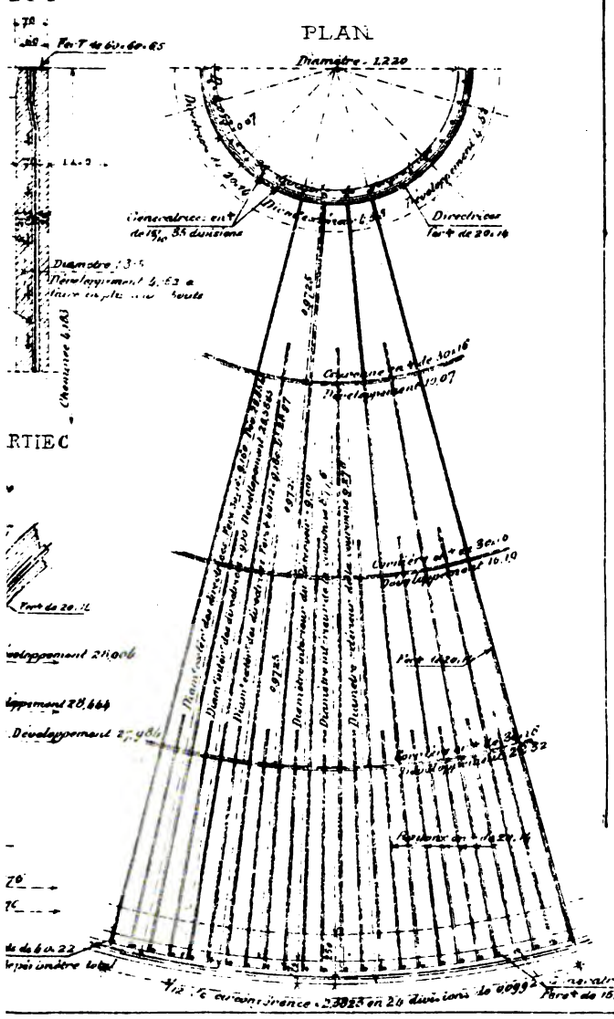
DÉTAIL D'UN PILIER



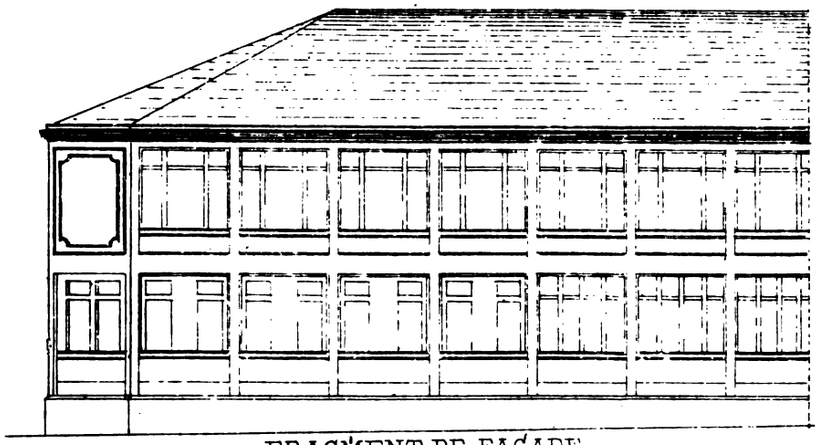
## COUPES



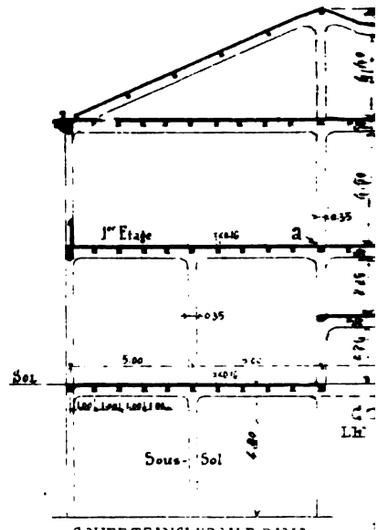

## PLAN



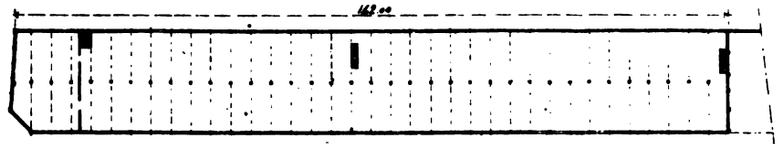
# USINE DE LA Cie CE



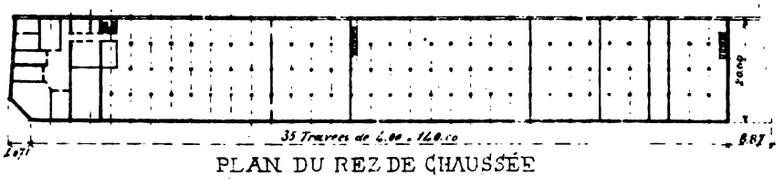
FRAGMENT DE FAÇADE




COUPE TRANSVERSALE DANS LE RADIER GÉNÉRAL



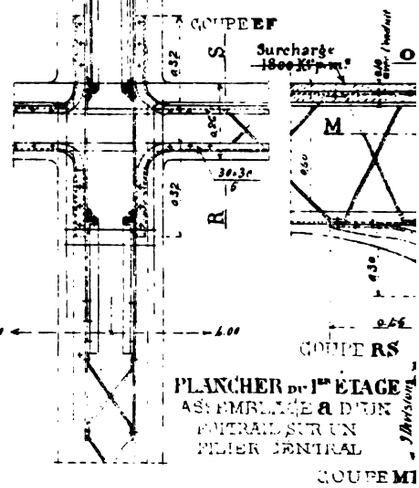
PLAN DE L'ETAGE




PLAN DU REZ DE CHAUSSÉE

COUPE OP

COUPE EF

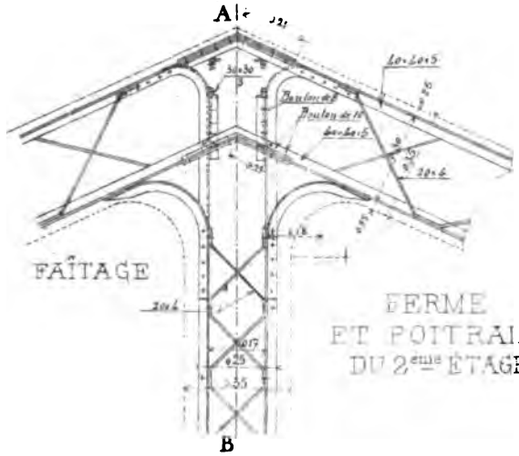



COUPE RS

PLANCHER du 1er ÉTAGE
ASSEMBLAGE a D'UN POITRAIL SUR UN PILIER CENTRAL

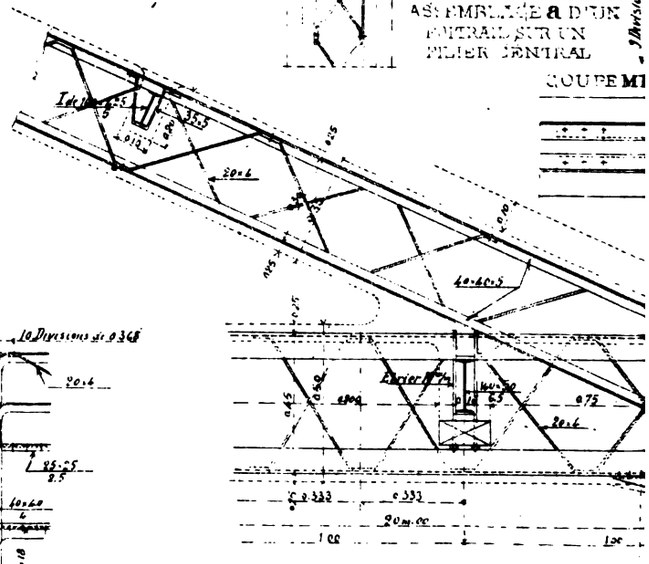
COUPE MI

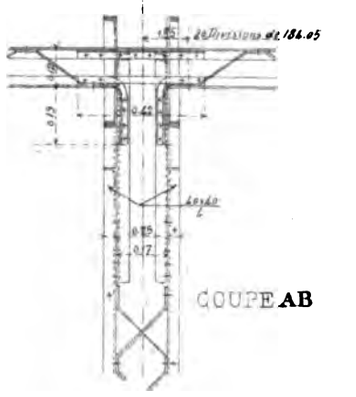
A



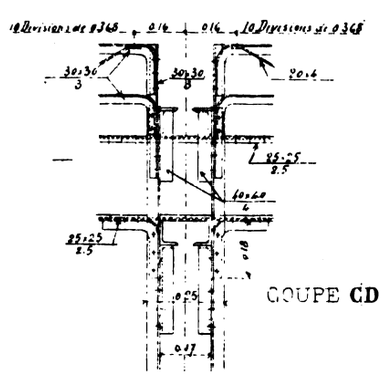

FERME ET POITRAIL DU 2ème ÉTAGE

B





COUPE AB

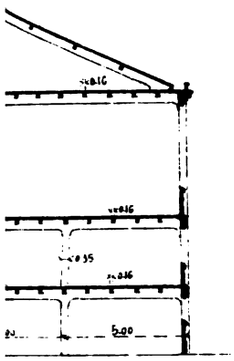


COUPE CD

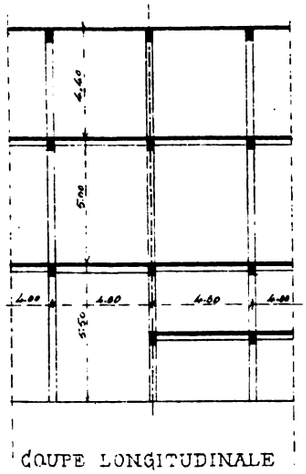
ATTACHE SUR PILIER

# NTRALE DES ÉMERIS

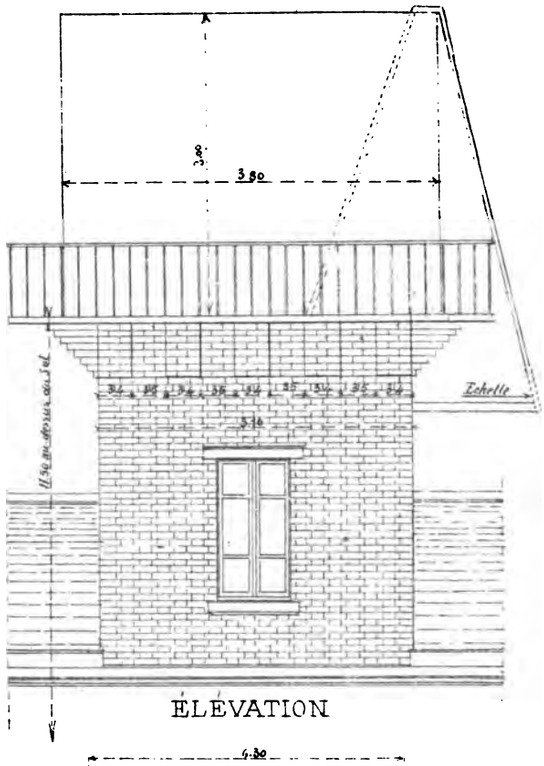
*Ingénieur-Constructeur:* M.A. BONNA



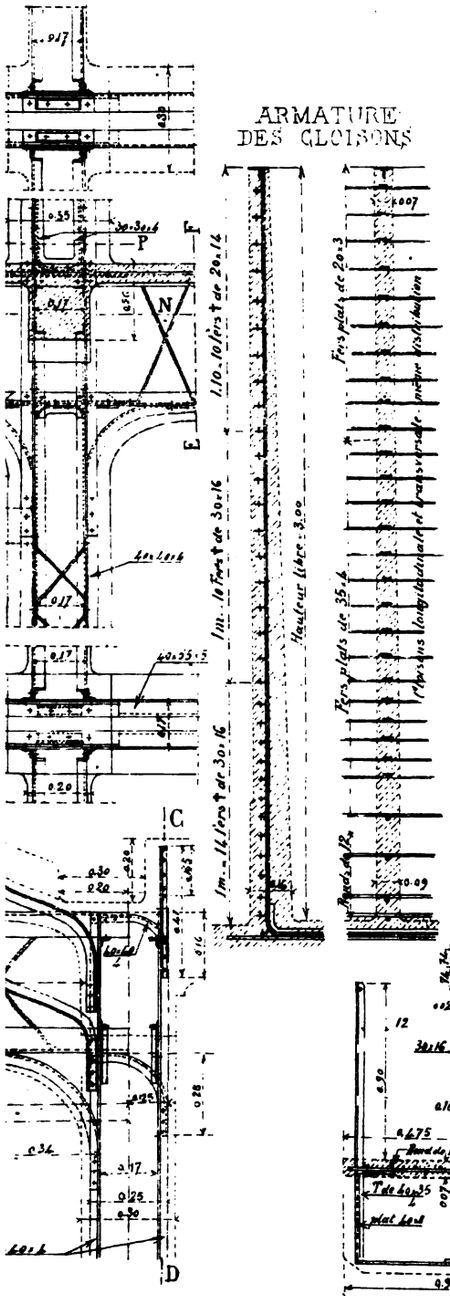
PE TRANSVERSALE DANS
'LANCHER INTERMEDIAIRE



COUPE LONGITUDINALE

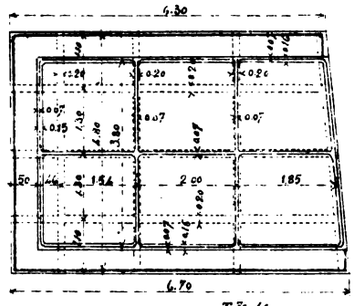


ÉLÉVATION

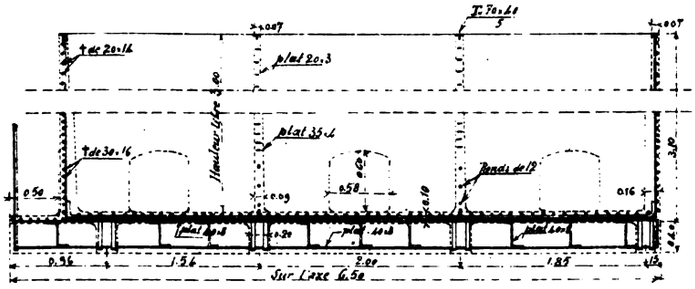


ARMATURE
DES CLOISONS

**RÉSERVOIR DE L'USINE**
**Capacité 60 M³**



PLAN



COUPE LONGITUDINALE

DÉTAIL

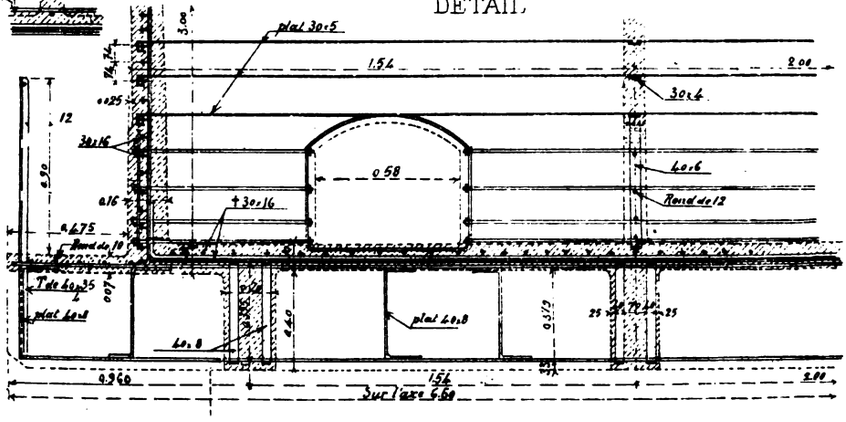
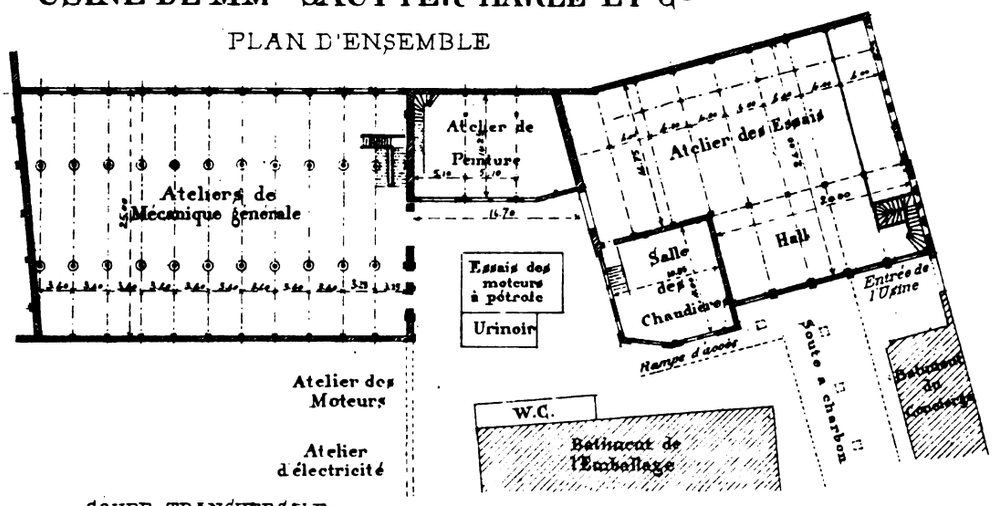
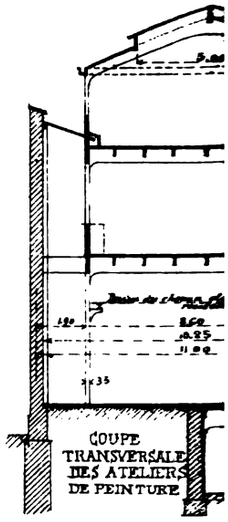


**Planche XIX.**

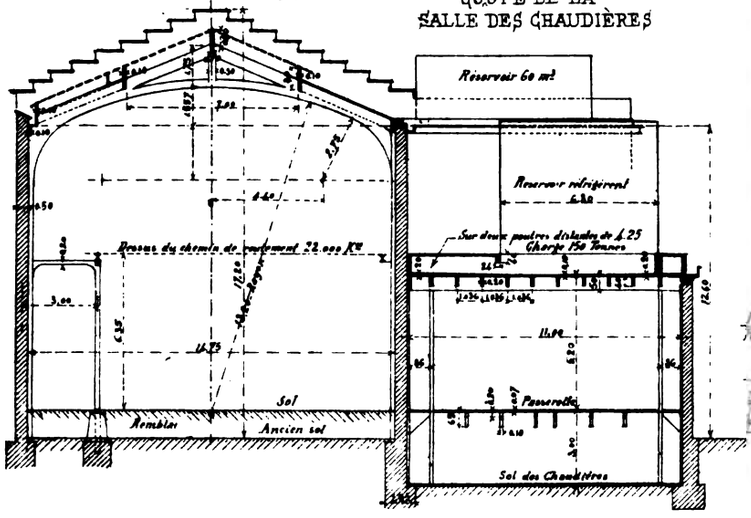
## USINE DE MMRS SAUTTER-HARLÉ ET Cie

PLAN D'ENSEMBLE



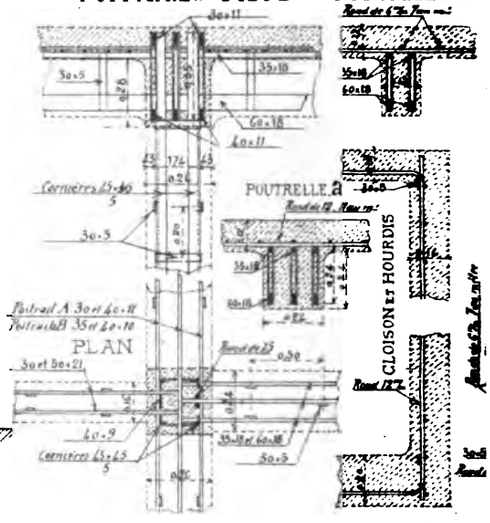

COUPE TRANSVERSALE
ATELIERS DES ESSAIS



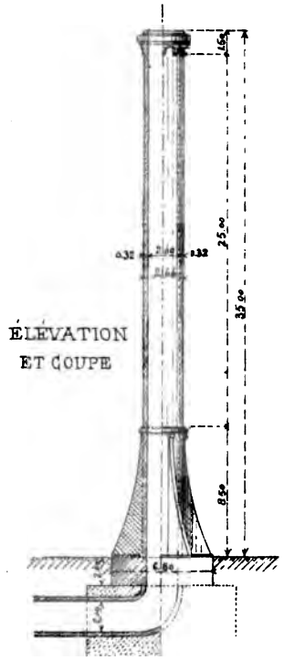

COUPE DE LA SALLE DES CHAUDIÈRES

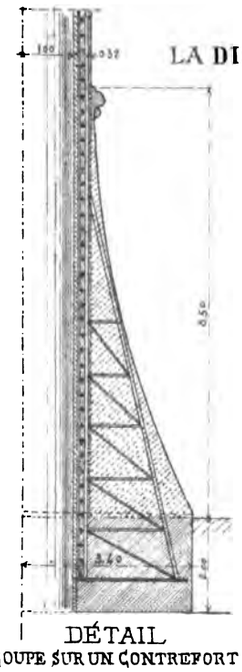
COUVERTURE DES SOU

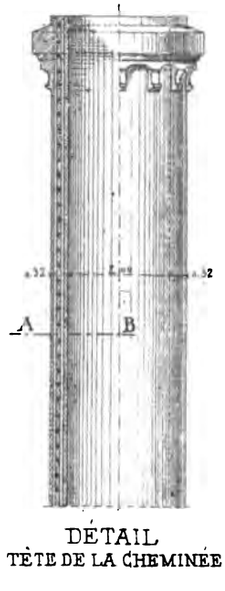
POITRAILS A ET B — POUTRELLE b

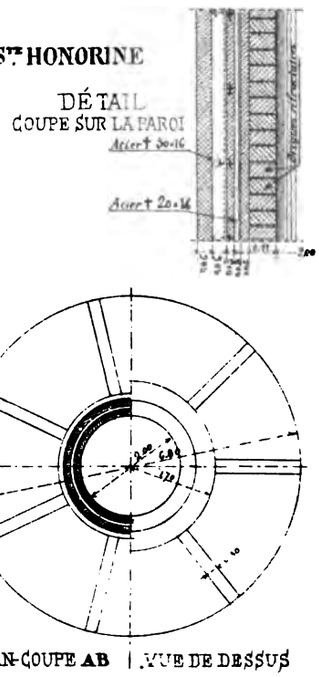



## CHEMINÉE DE LA DISTILLERIE DE CONFLANS Ste HONORINE



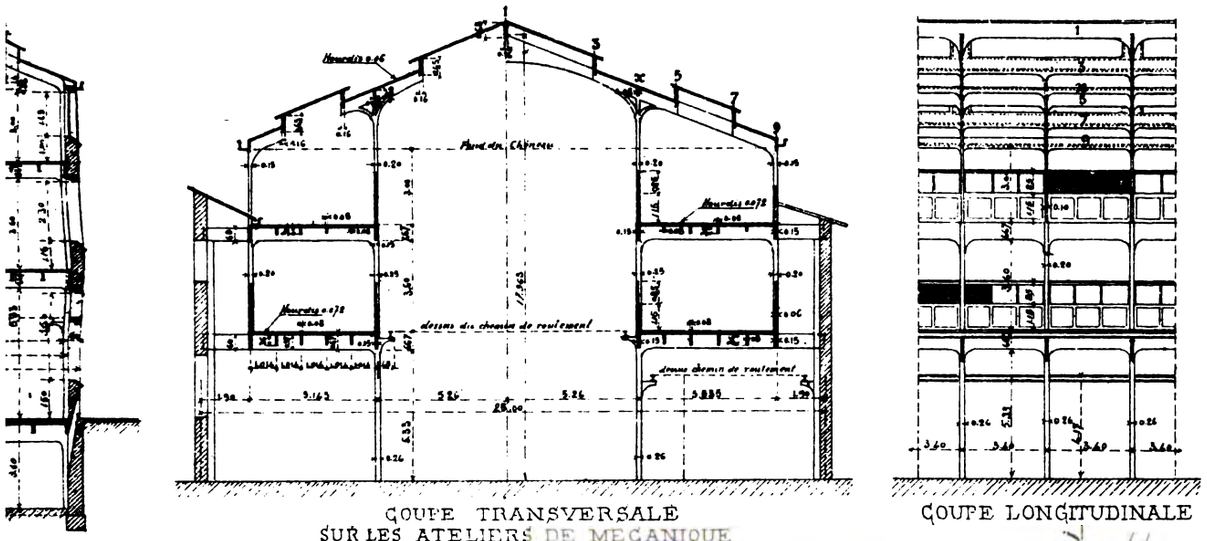



# LE. CHEMINÉE. ESCALIER

*Ingénieur-Constructeur:* Mr BONNA

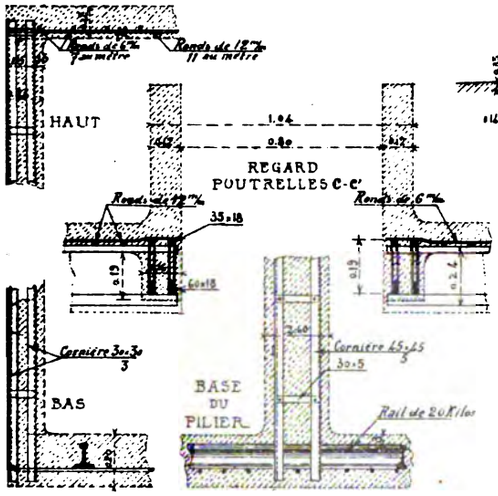


COUPE TRANSVERSALE
SUR LES ATELIERS DE MECANIQUE

COUPE LONGITUDINALE

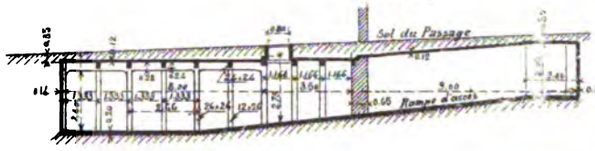
ES A CHARBON - DÉTAILS

LOISON AU DROIT
DU DOSSERET

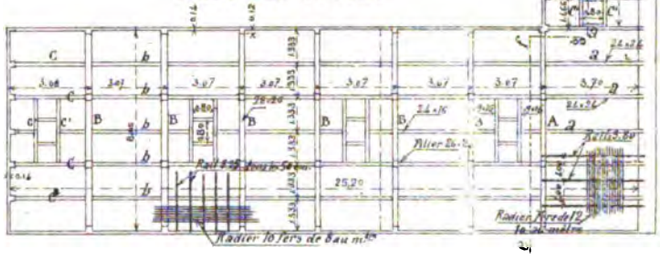



SOUTES A CHARBON

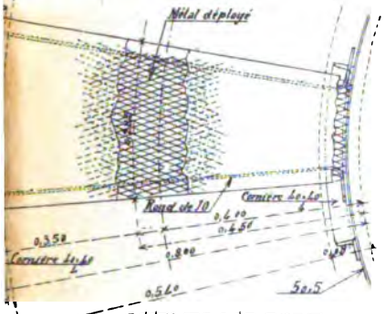
COUPE SUIVANT efghij



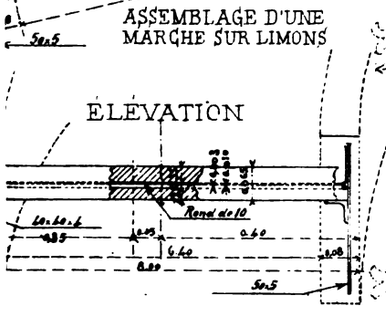
PLAN DES SOUTES



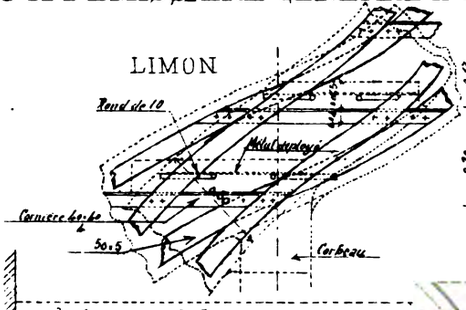
## ESCALIER DE L'AQUEDUC DE L'ÉMISSAIRE GÉNÉRAL A CHANTELOUP



ASSEMBLAGE D'UNE
MARCHE SUR LIMONS



ÉLÉVATION



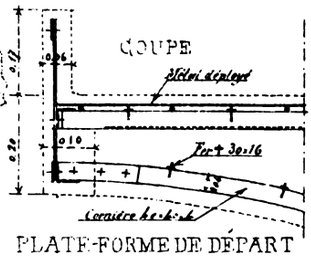
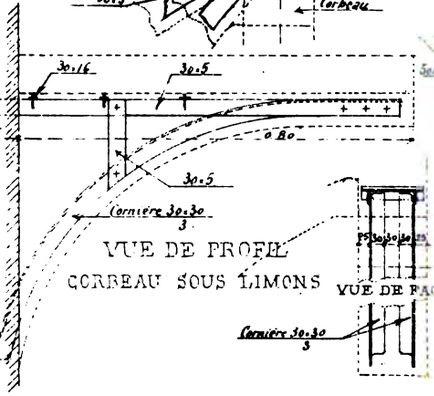
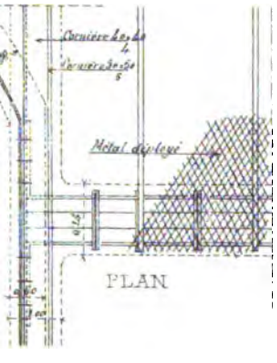




PLATE-FORME DE DÉPART

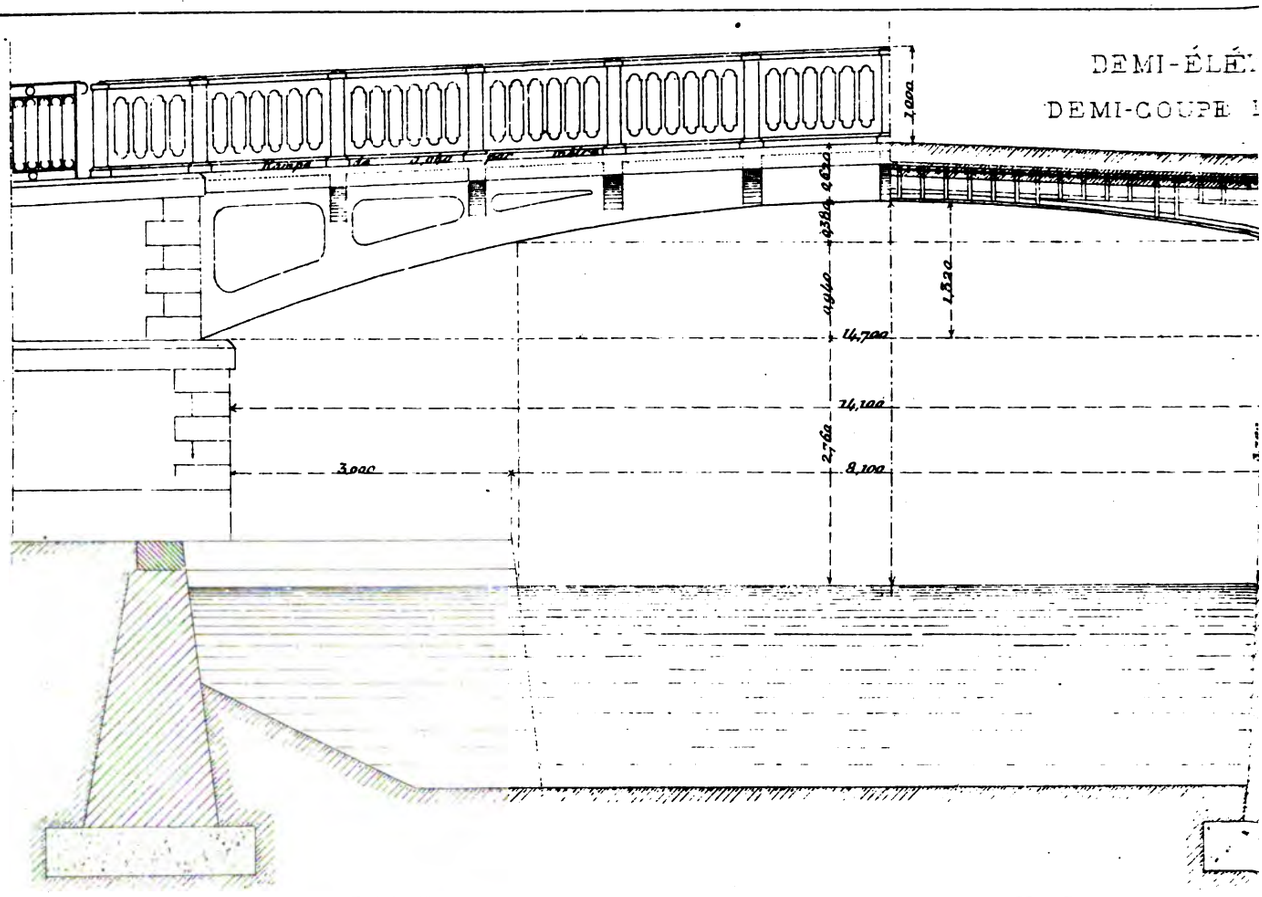


VUE DE PROFIL
CORBEAU SOUS LIMONS

VUE DE FACE



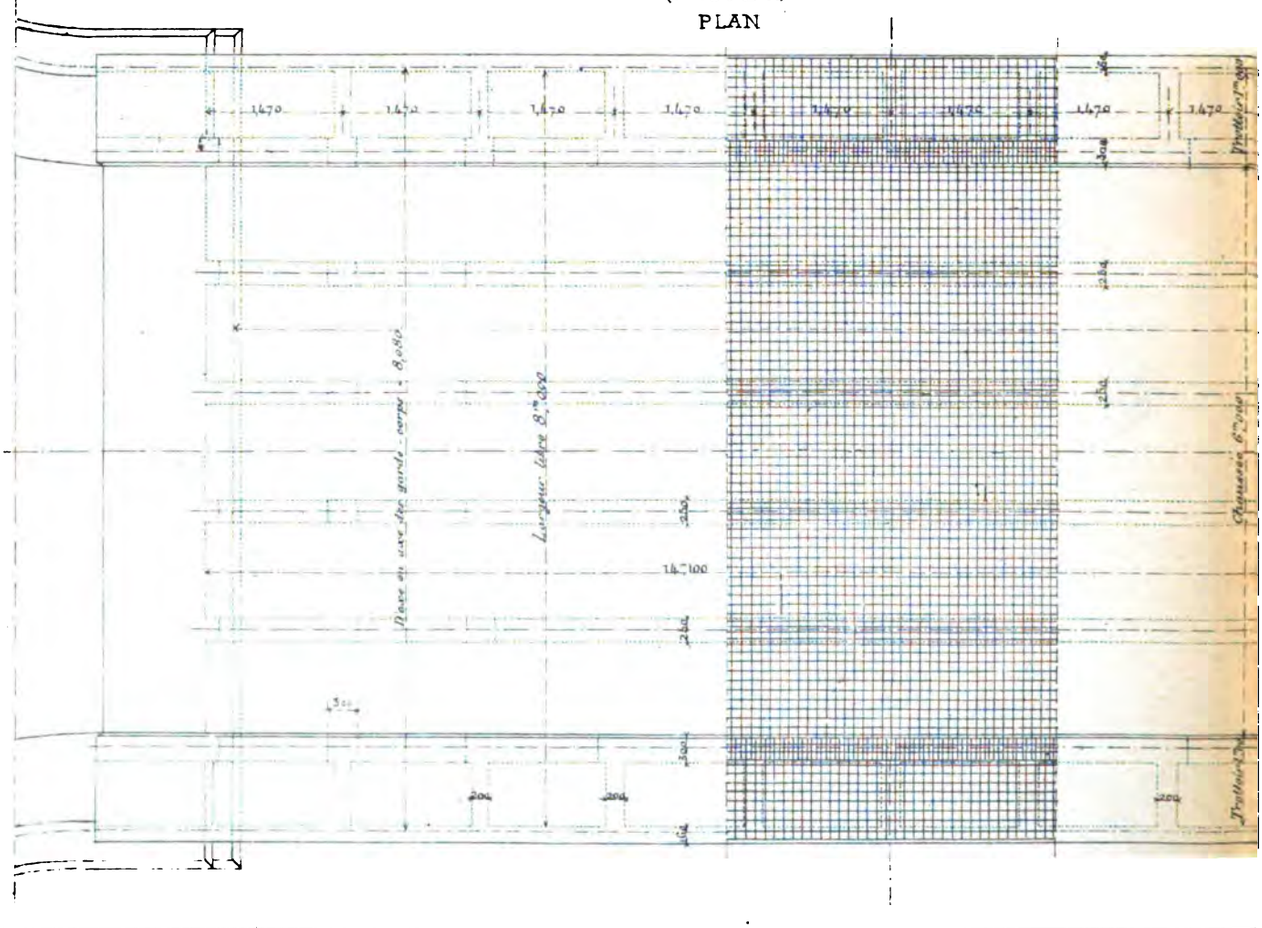
PLAN




## PONT SUR LE CANAL DU MIDI — A TOULOUSE

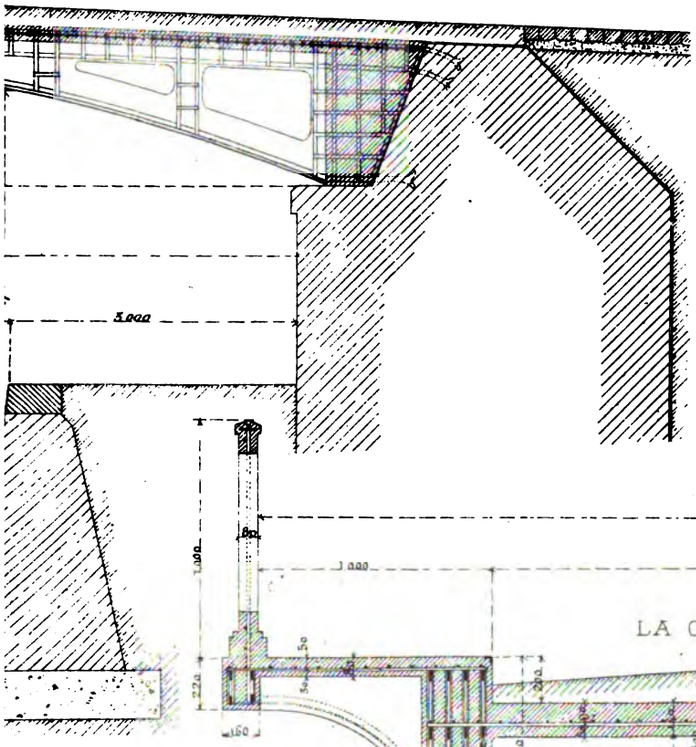
(PROJET.)

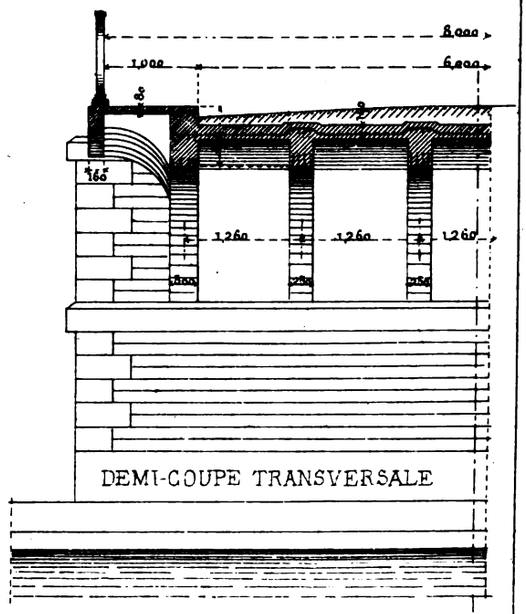
PLAN

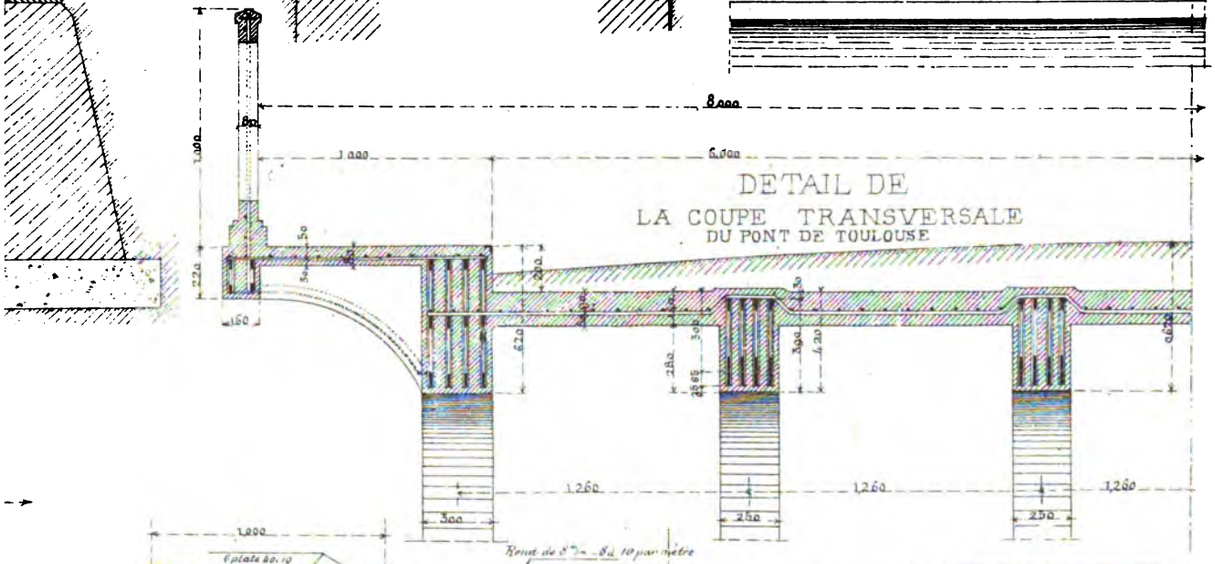


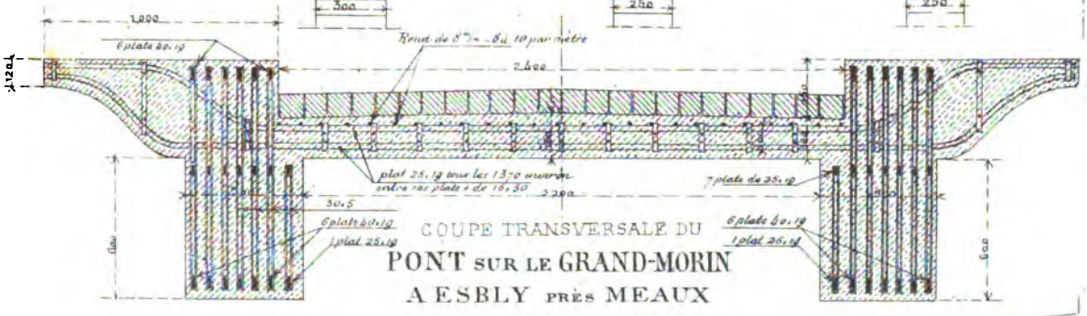
ATION ET

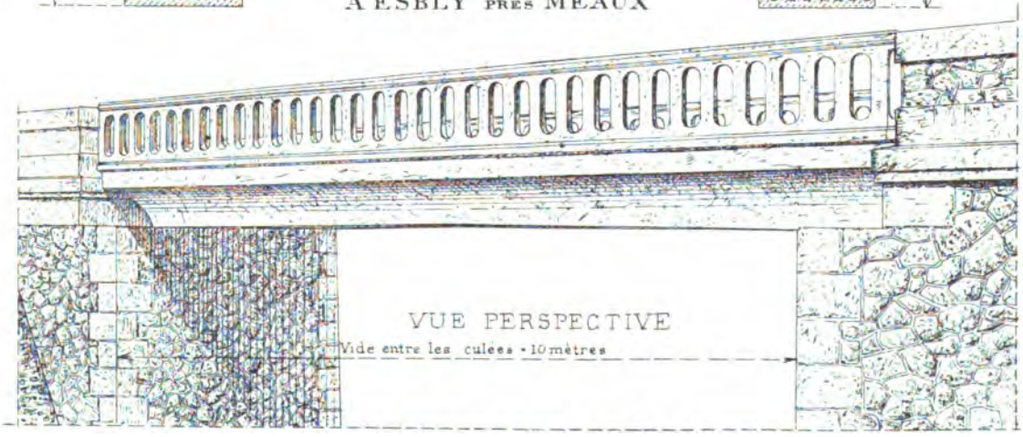
ONGITUDINALE

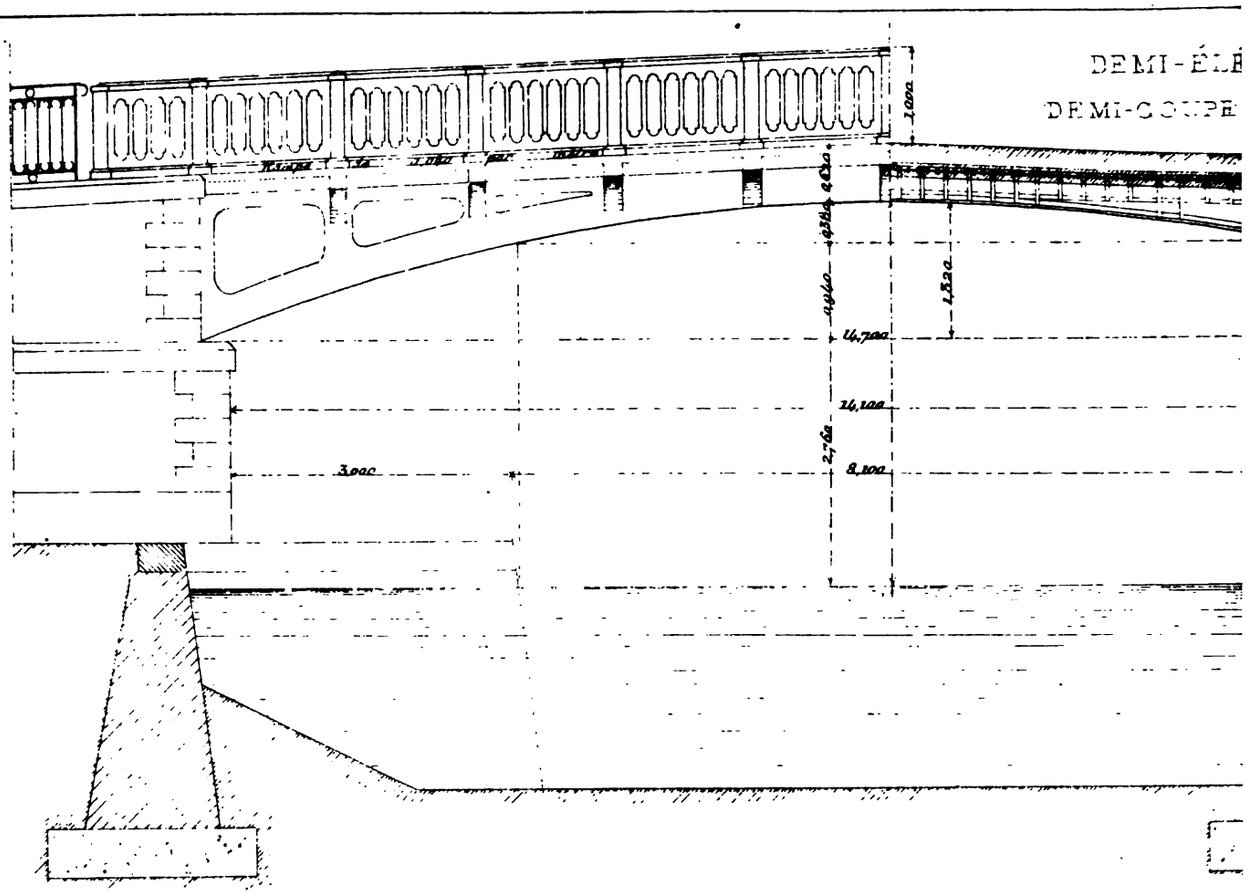


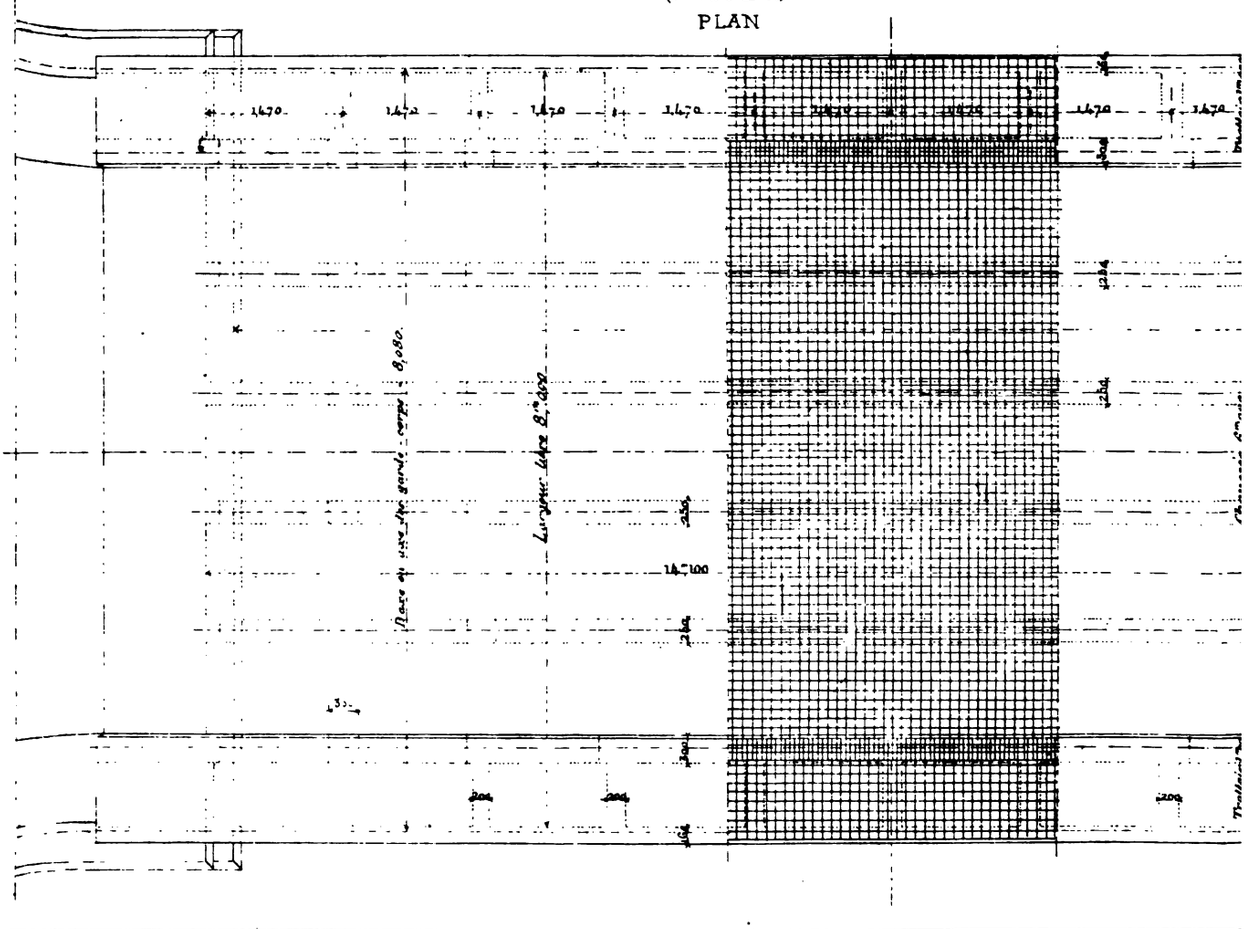






## PONT SUR LE CANAL DU MIDI — A TOULOUSE

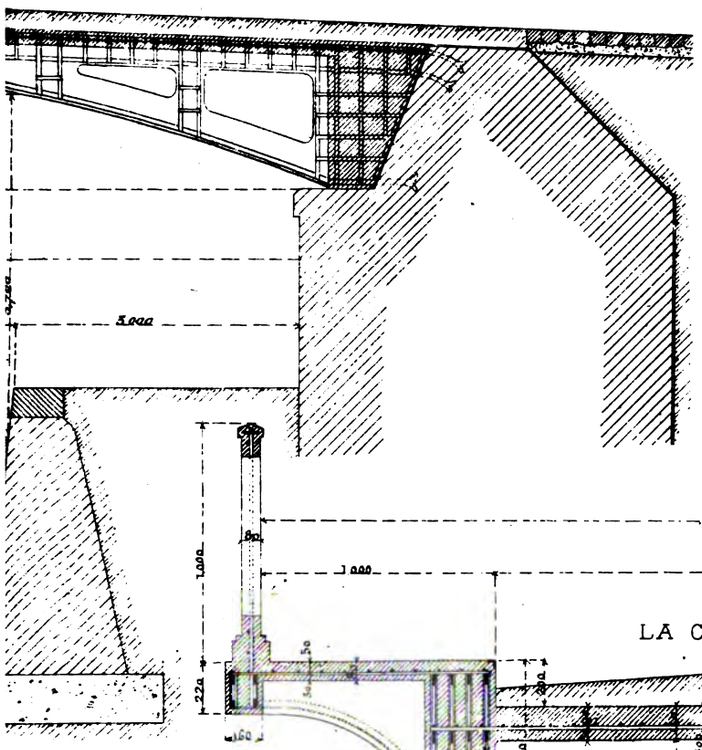
(PROJET.)

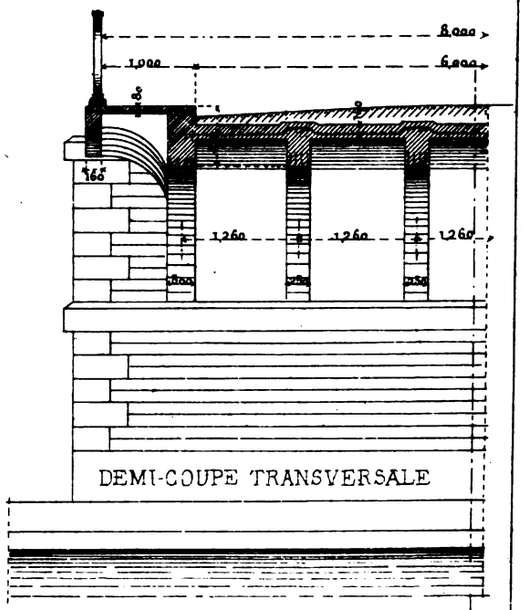
PLAN



VATION ET

LONGITUDINALE

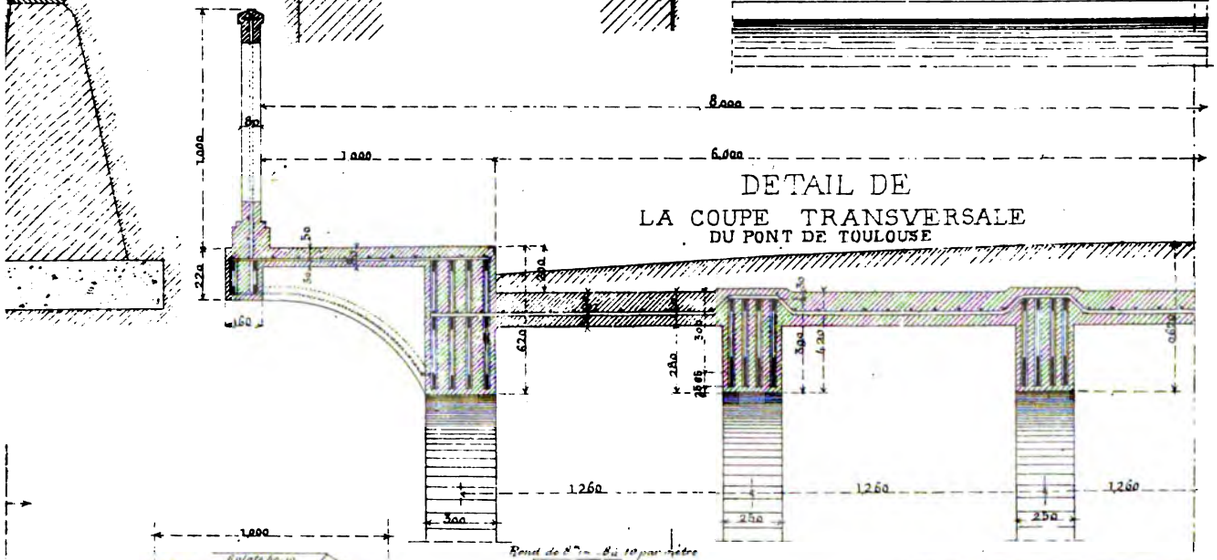


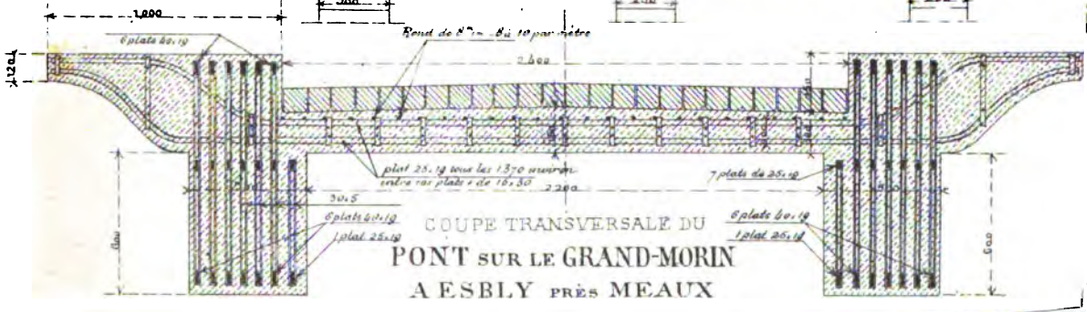



DETAIL DE

LA COUPE TRANSVERSALE

DU PONT DE TOULOUSE



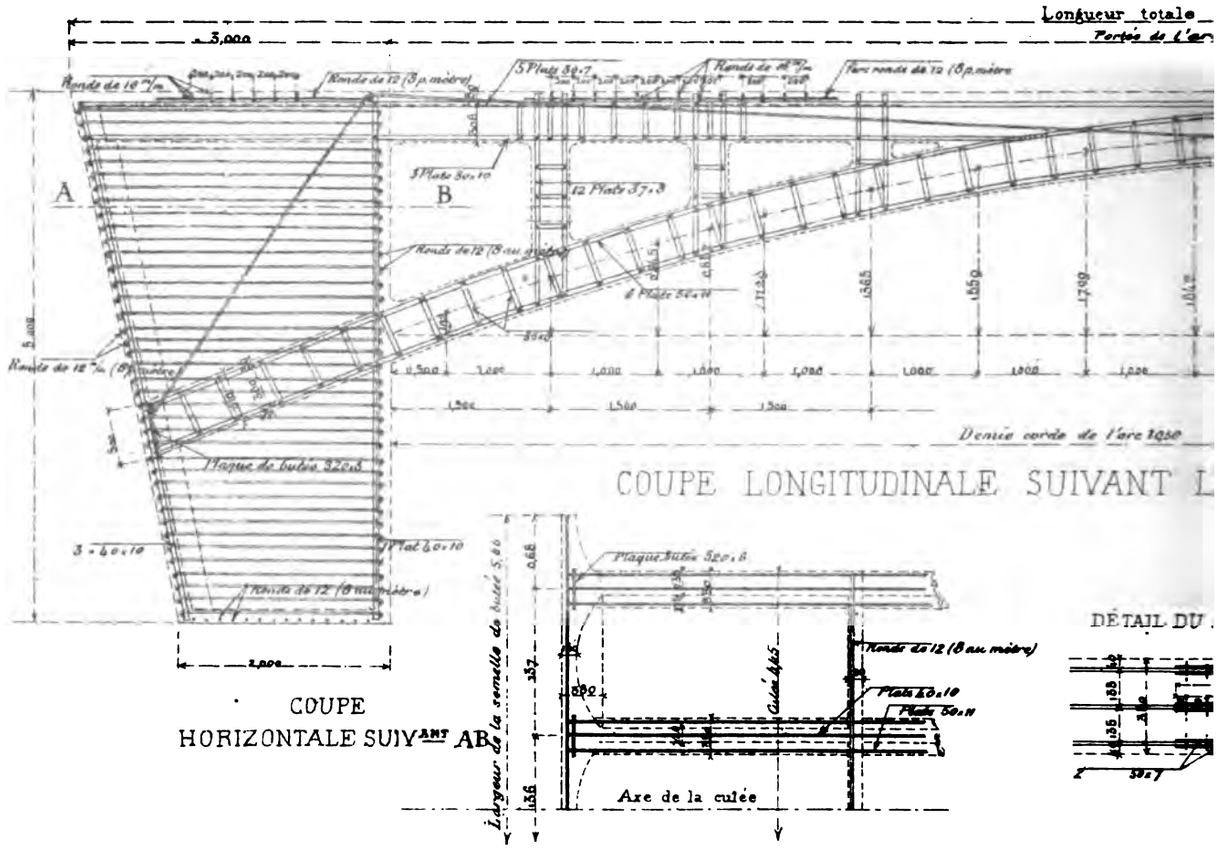

COUPE TRANSVERSALE DU

PONT SUR LE GRAND-MORIN

A ESBLY PRÈS MEAUX

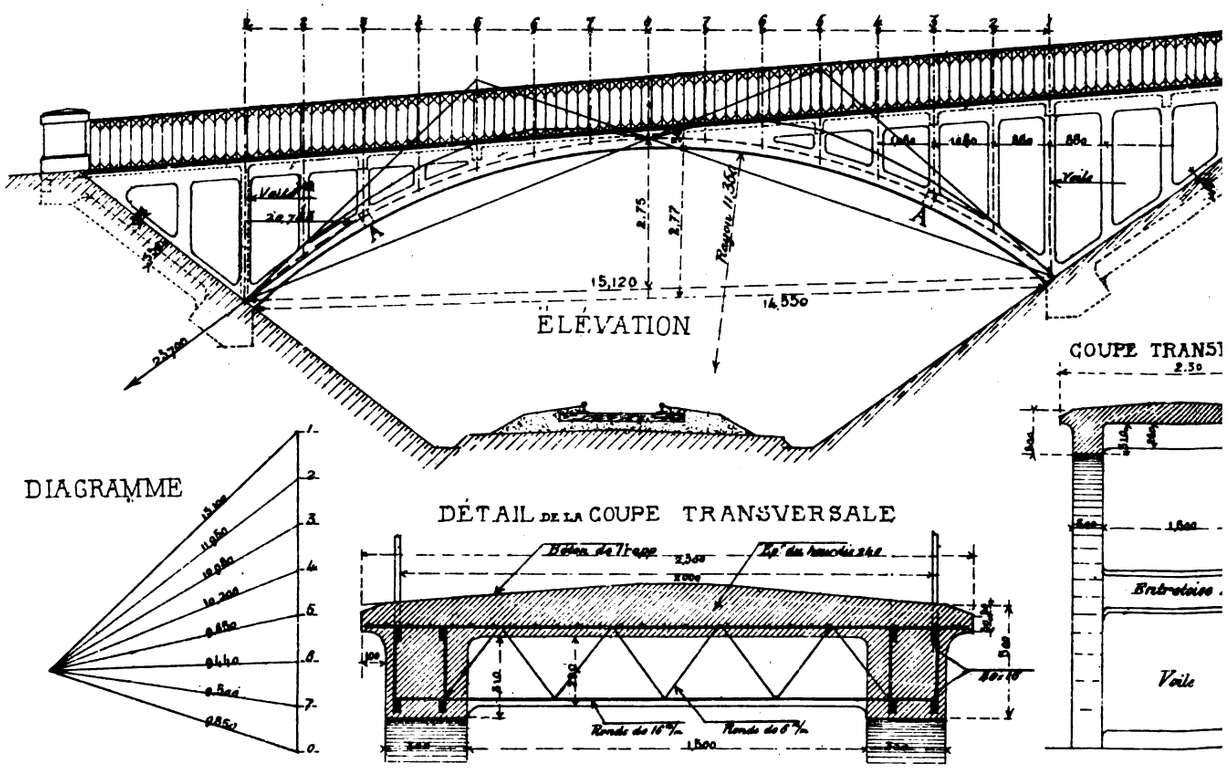
**Planche XXII.**

# PONT DE 21ᴹ D'OUVERTURE



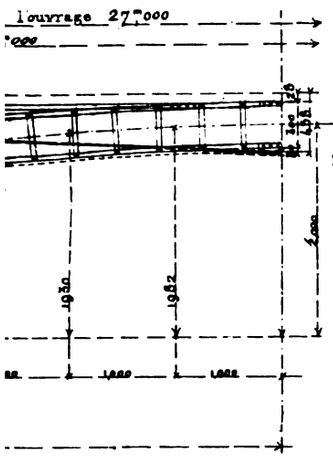

# PASSERELLE POUR LE CHEMIN DE LA BELLE-CROIX

## LIGNE DE PROVINS A ESTERNAY

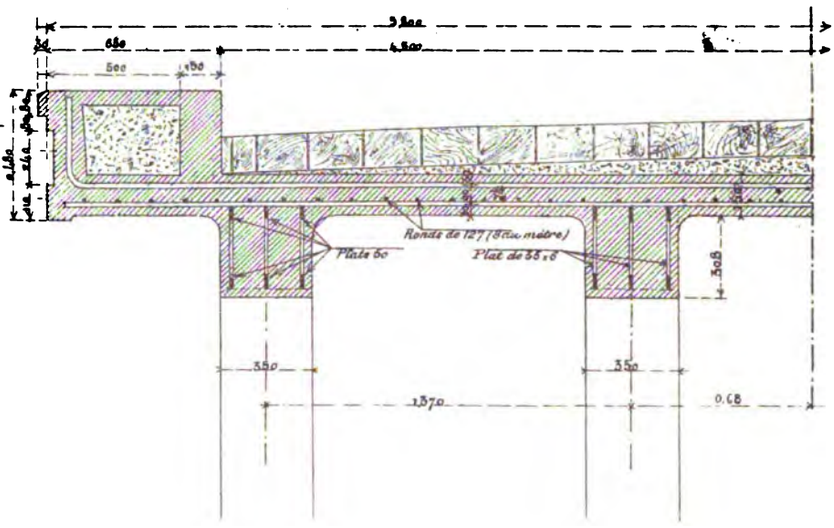



Berger et Guillerme CIMENT ARMÉ - Vᵉ Dunod Éditeur

# ɹR LE GERS A AUCH



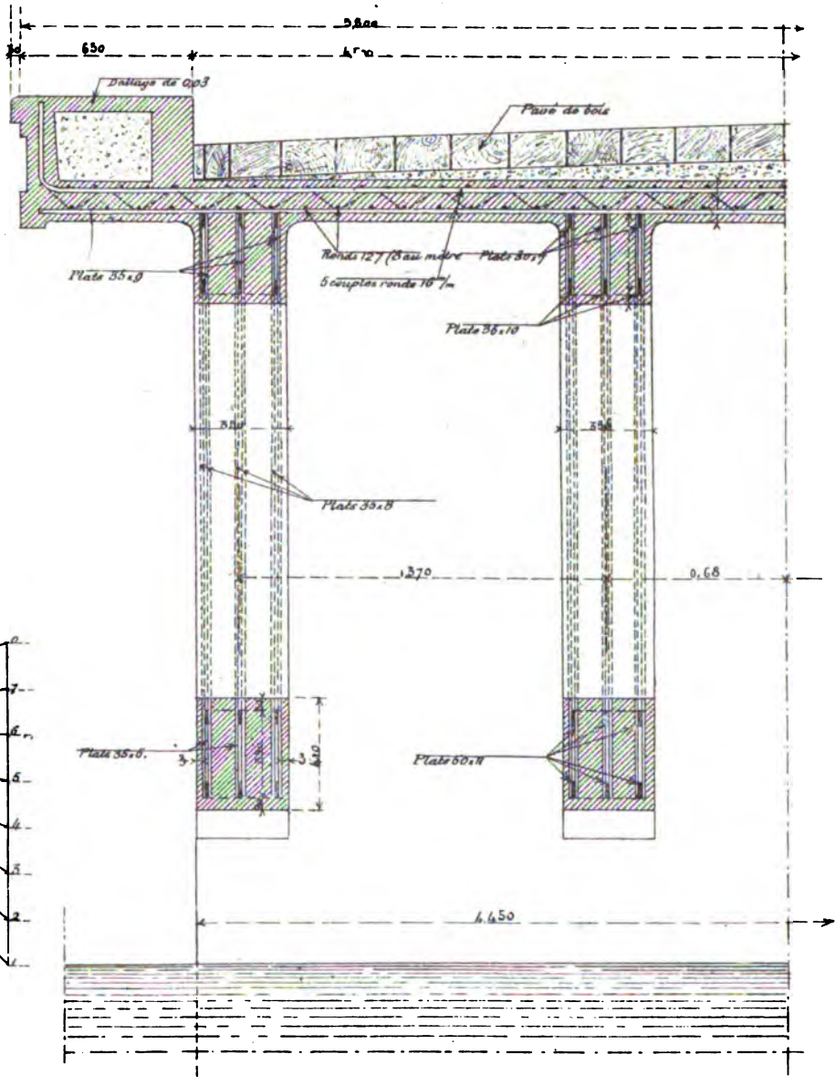

AXE DU PONT

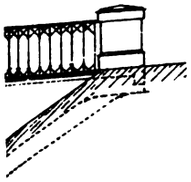


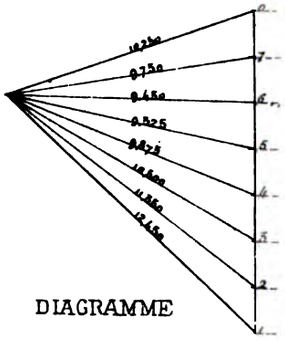

DEMI-COUPE TRANSVERSALE A LA CLEF

PONT SUR LE GERS

INT DES ARCS



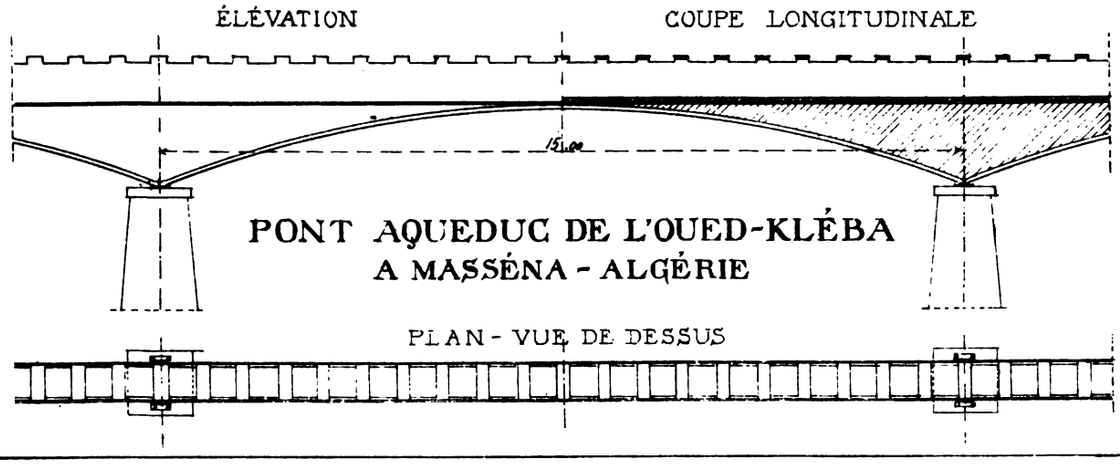






DIAGRAMME

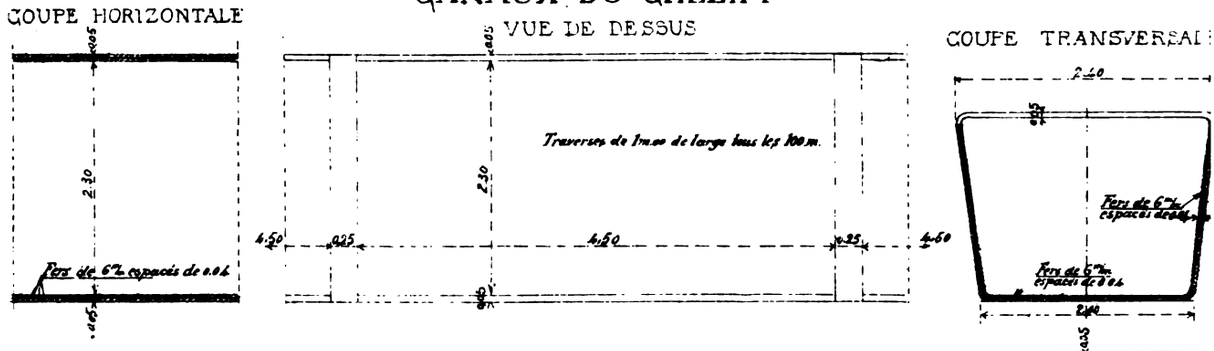
DEMI COUPE TRANSVERSALE A LA RETOMBÉE

PONT SUR LE GERS

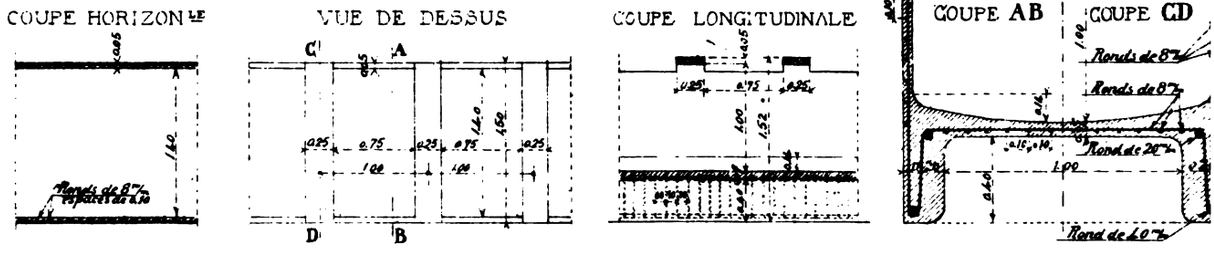



## PONT AQUEDUC DE L'OUED-KLÉBA
### A MASSÉNA - ALGÉRIE

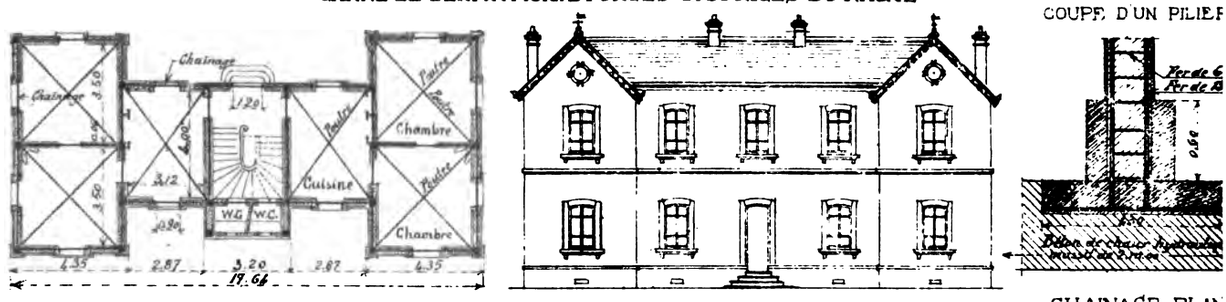
## CANAUX DU CHÉLIFF

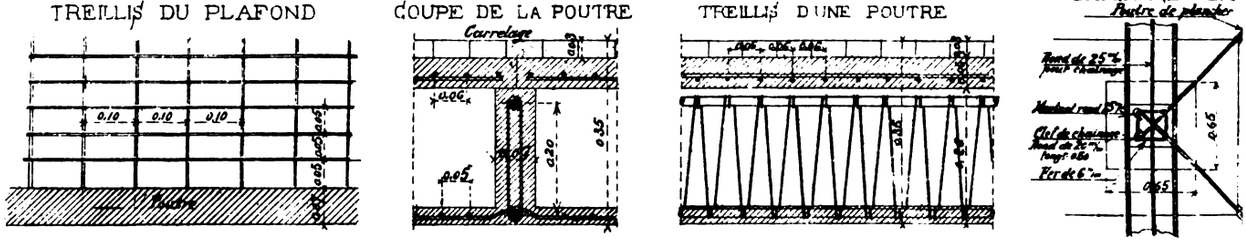



## BÂCHES DU HAMIZ




## MAISON ÉCLUSIÈRE DE JONAGE
### CANAL DE DÉRIVATION. — FORCES MOTRICES DU RHÔNE



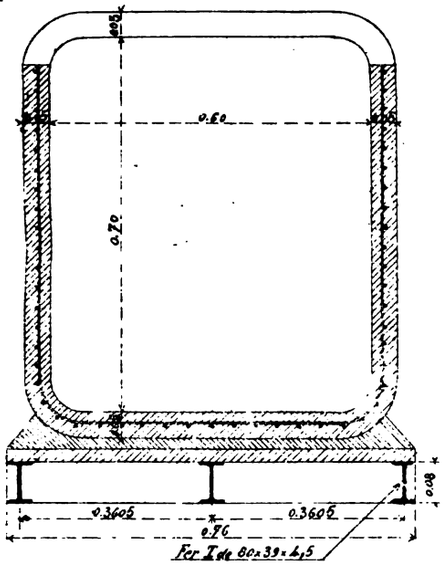



# DIVERS

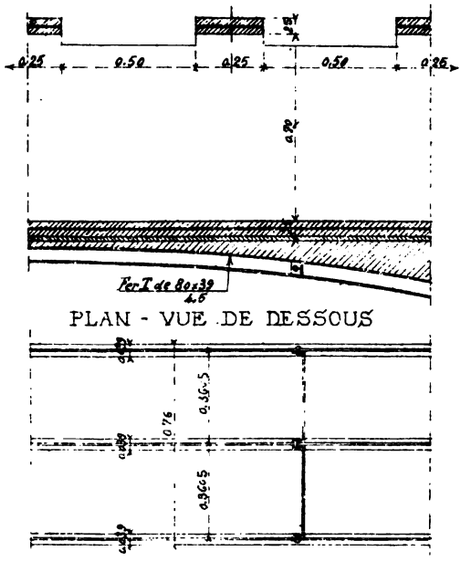
*Ingénieur-Constructeur :* Société J. et A. PAVIN DE LAFARGE

SALE

COUPE TRANSVERSALE

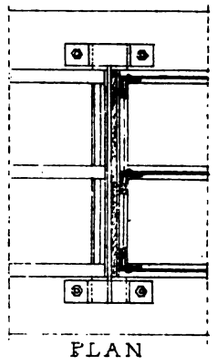



COUPE LONGITUDINALE




PLAN - VUE DE DESSOUS



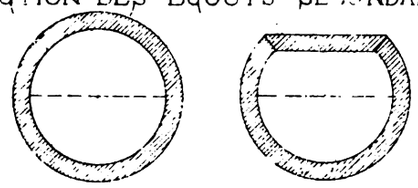
PLAN

RETOMBÉE SUR LES APPUIS

ÉLÉVATION

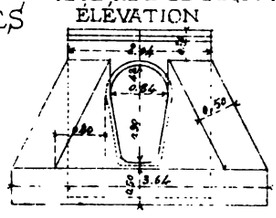
## ÉGOUTS DE MAISON CARRÉE - ALGÉRIE

SECTION DES ÉGOUTS SECONDAIRES

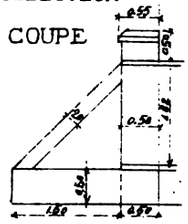


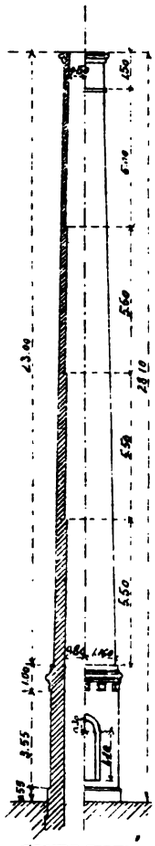
TÊTE AVAL DE L'ÉGOUT COLLECTEUR

ÉLÉVATION



COUPE

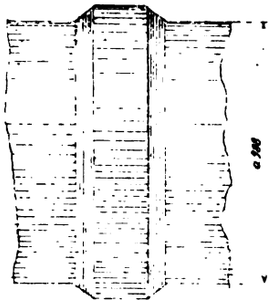




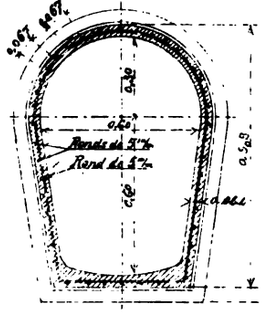
CHEMINÉE DU BASSIN DE RADOUB A ALGER

## ÉGOUTS PRINCIPAUX

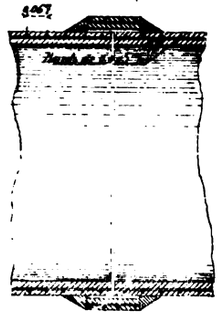
VUE DE PROFIL



COUPE - TRANSVERSALE

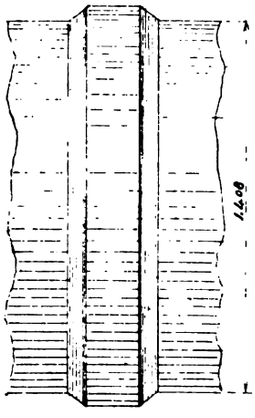



COUPE - LONGITUDINALE

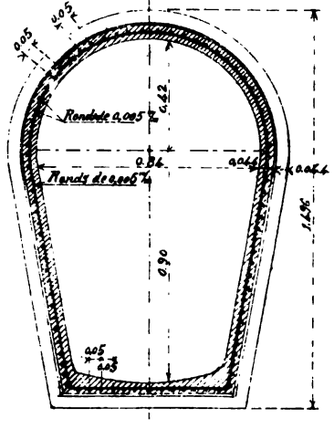


## ÉGOUT COLLECTEUR

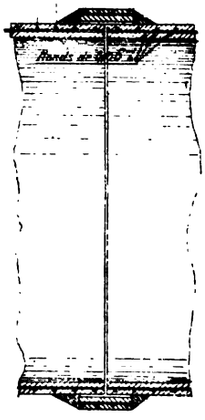
VUE DE PROFIL



COUPE TRANSVERSALE

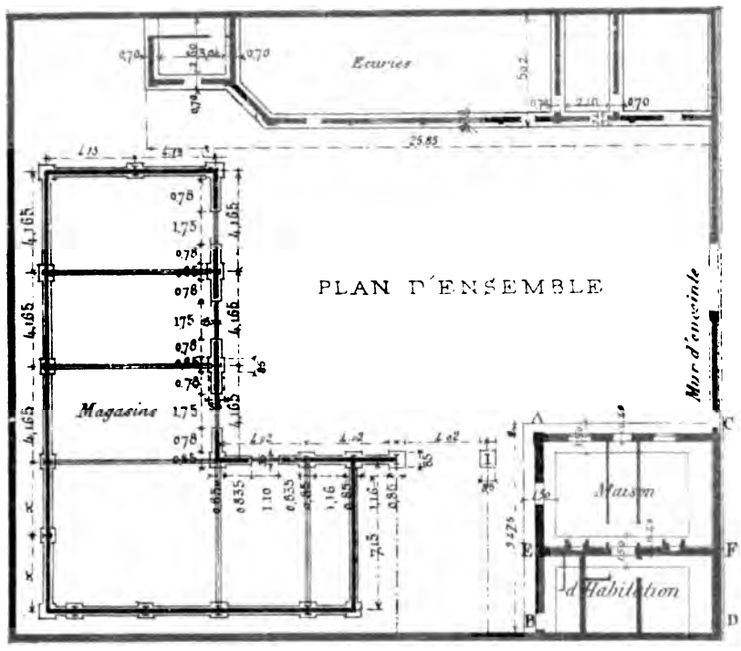



COUPE LONGITUDINALE

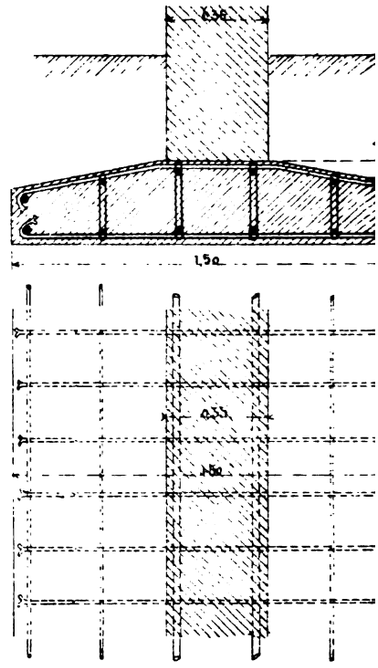


Poutre de plancher

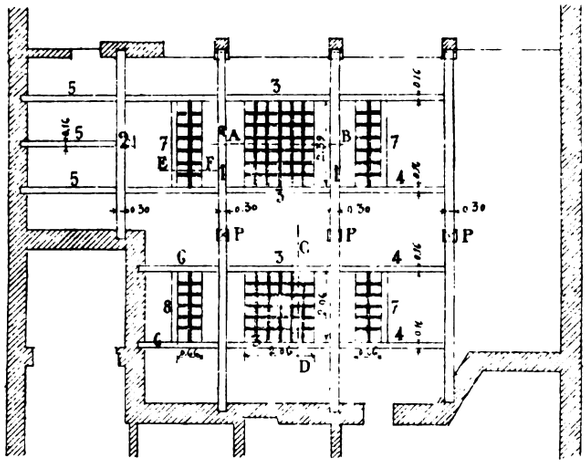
**Planche XXIV**



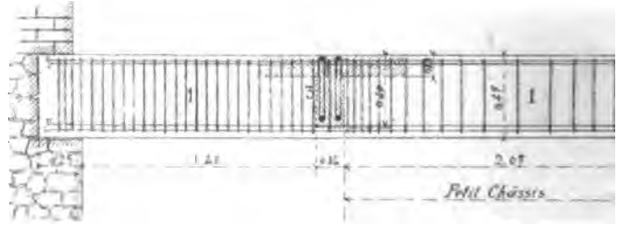

## FONDATIONS SUR MAUVAIS TERRAIN



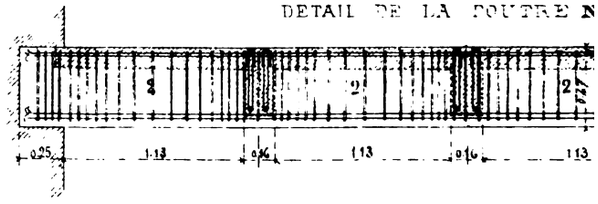
FONDATION DU MUR **AB**



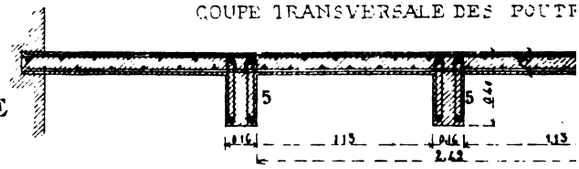
PLAN



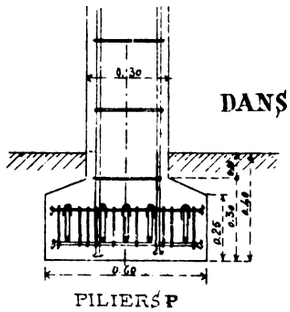

DÉTAIL DE LA POUTRE N



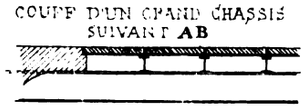
COUPE TRANSVERSALE DES POUTR



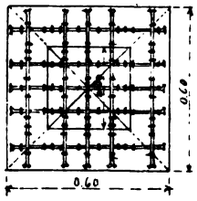
## PLANCHER DE COUR
## DANS UNE CONSTRUCTION INDUSTRIELLE



PILIERS P

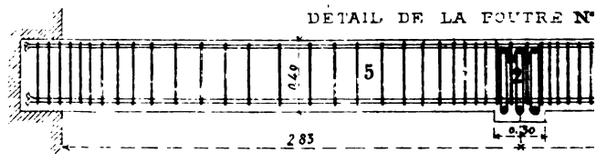


COUPE D'UN GRAND CHASSIS SUIVANT **AB**

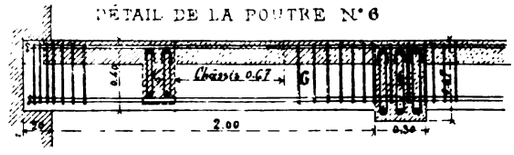


COUPE D'UN GRAND CHASSIS SUIVANT **CD**

DÉTAIL DE LA POUTRE N°



DÉTAIL DE LA POUTRE N° 6



# - PLANCHERS

*Ingénieur-Constructeur : Mr PIKETTY*

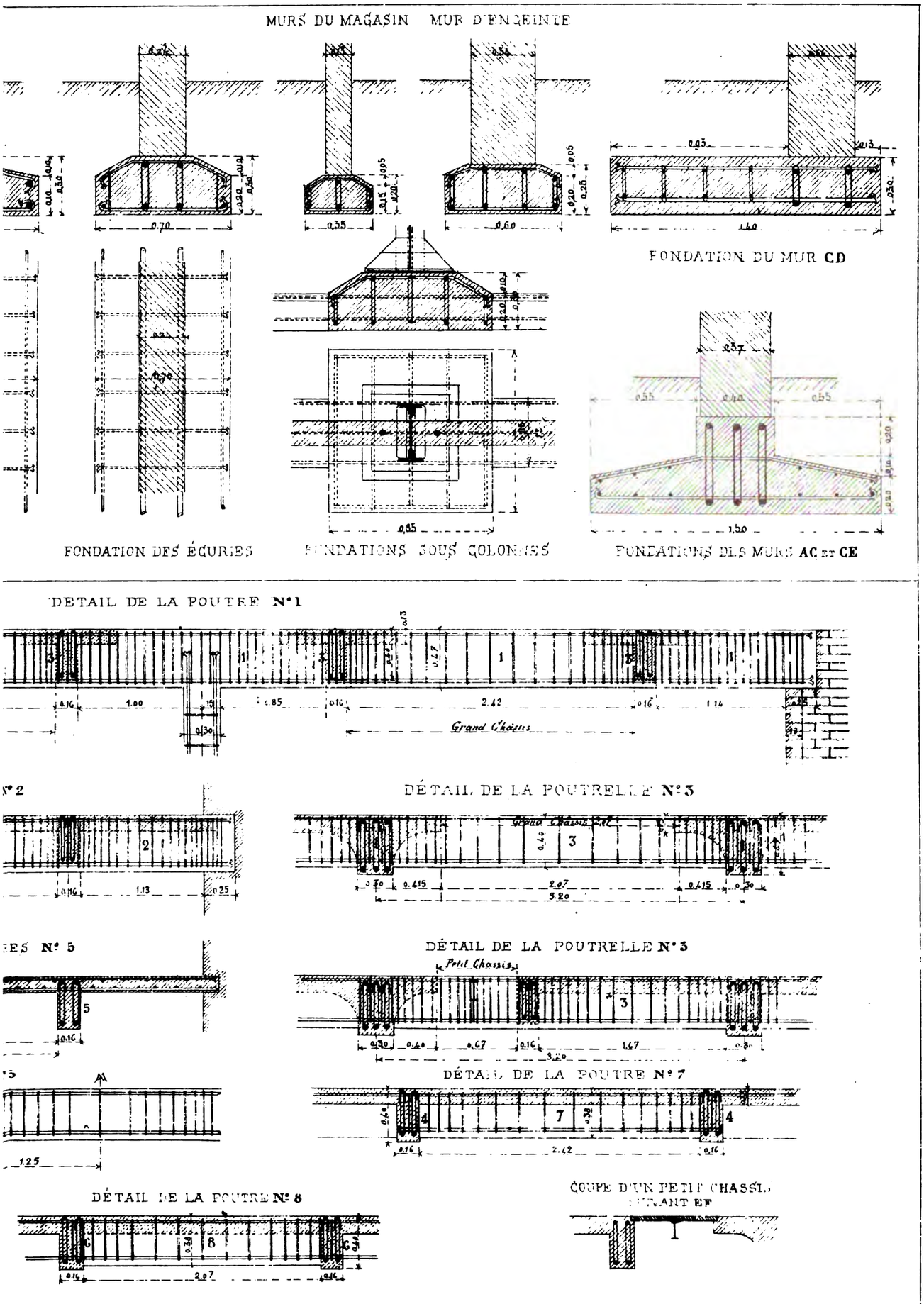
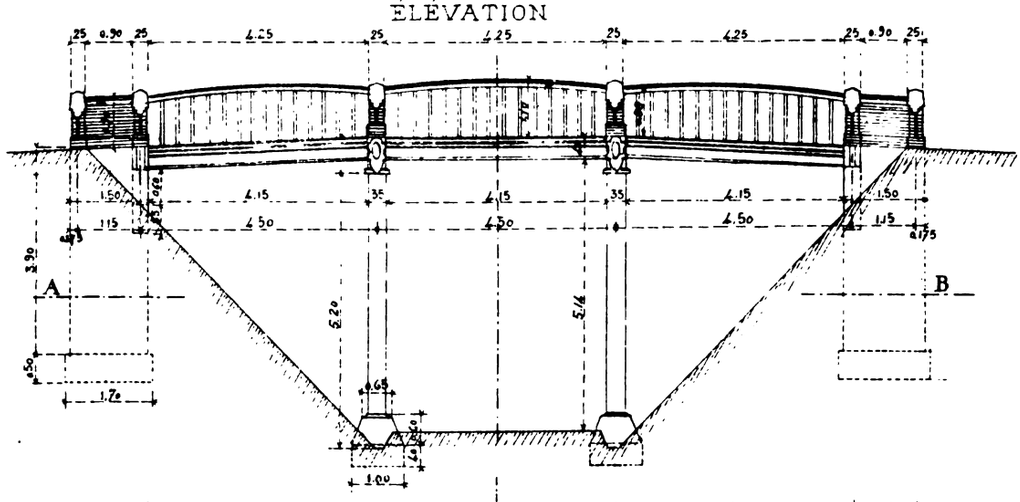
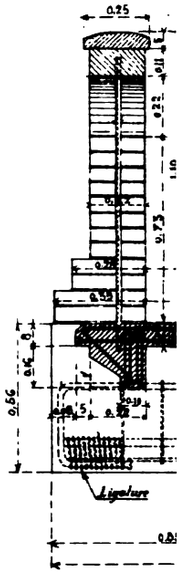


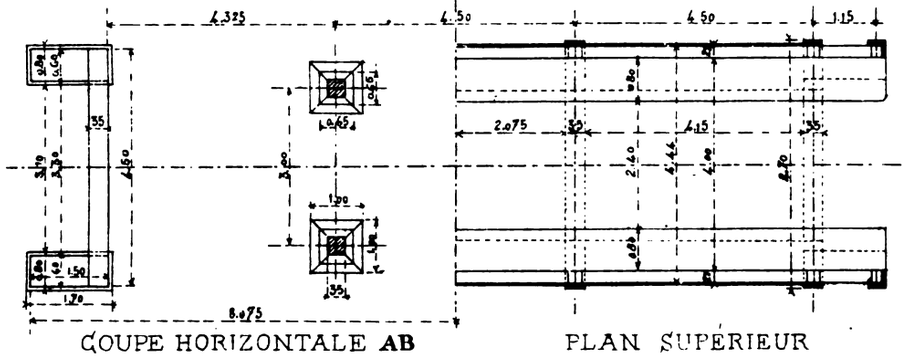

Planche XXVI.

## PONT DROIT POUR LE PASSAGE SU

ÉLÉVATION



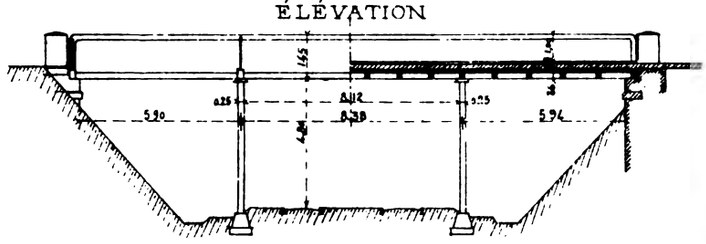


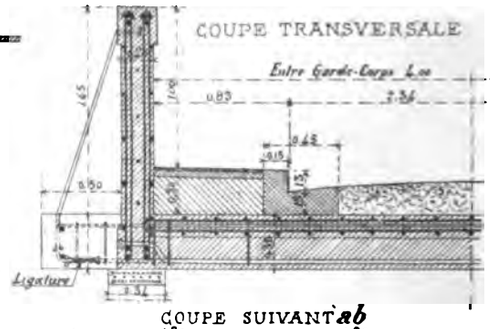


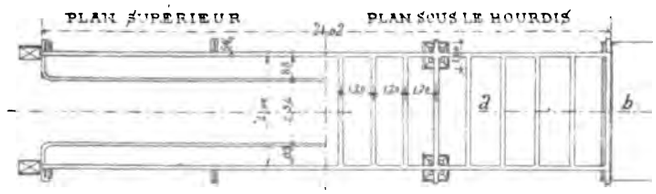
COUPE HORIZONTALE **AB** PLAN SUPÉRIEUR

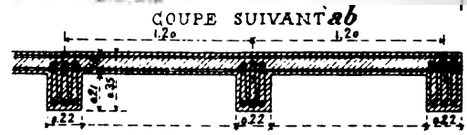
## PONT DROIT AVEC POUTRES DE RIVES FORMANT GARDE-CORPS

ÉLÉVATION



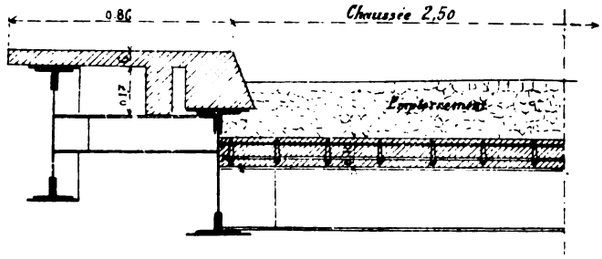


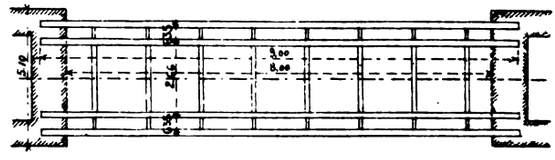




## PLATELAGE EN BÉTON ARMÉ D'UN PONT MÉTALLIQUE

DEMIE COUPE TRANSVERSALE DU TABLIER




PLAN

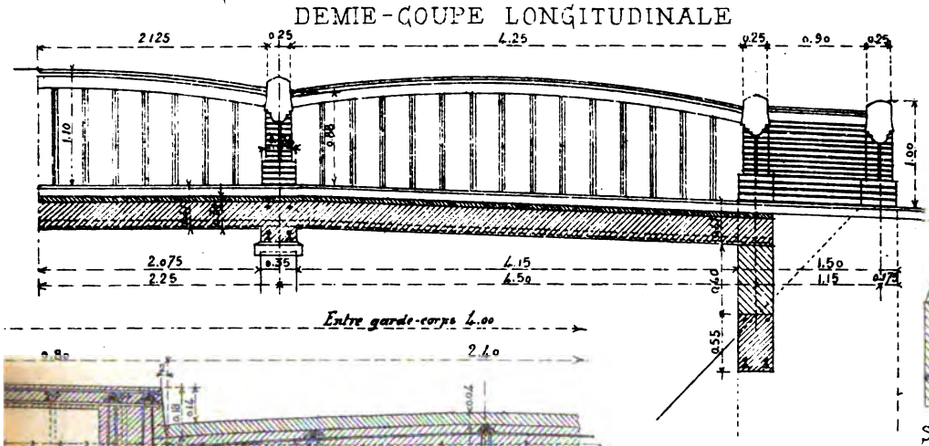


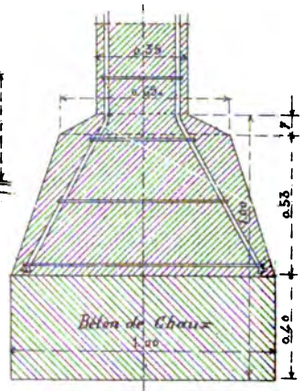
# SERELLES.

*Ingénieur-Constructeur :* Mr PIKETTY

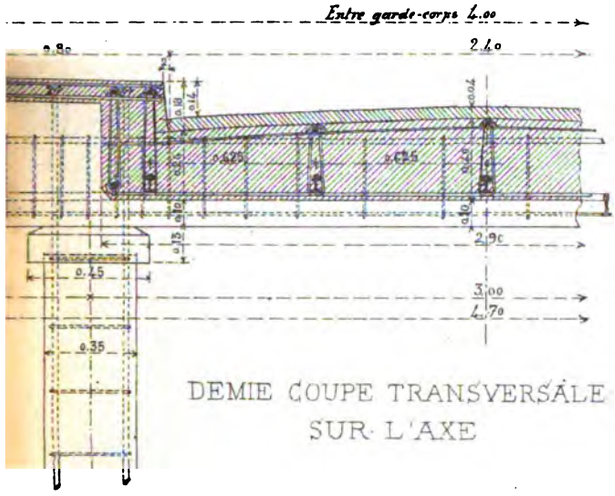
## ÉRIEUR D'UN CHEMIN VICINAL

DEMIE-COUPE LONGITUDINALE

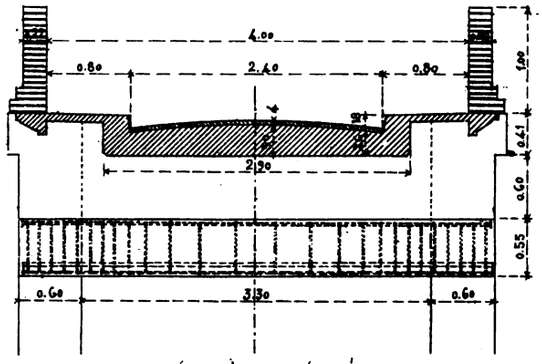



SEMELLE D'UNE COLONNE



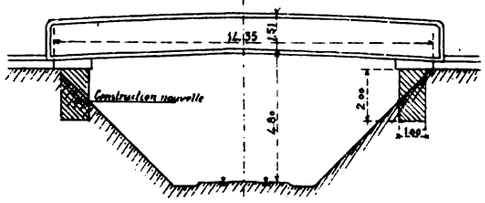

DEMIE COUPE TRANSVERSALE SUR L'AXE



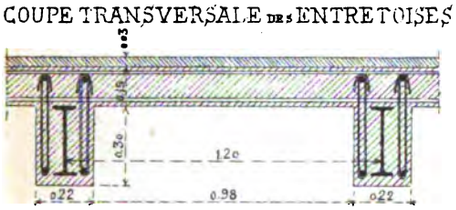

FACE D'UNE CULÉE

## RENFORCEMENT EN BÉTON ARMÉ D'UN PONT MÉTALLIQUE

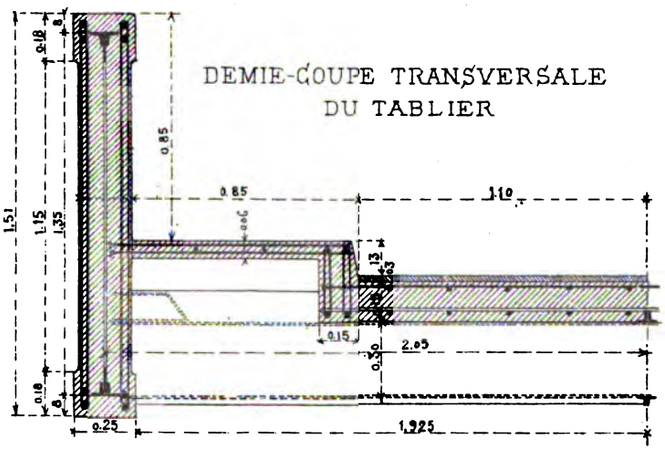
ÉLÉVATION




COUPE TRANSVERSALE DES ENTRETOISES

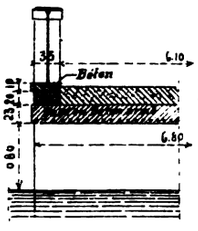



DEMIE-COUPE TRANSVERSALE DU TABLIER

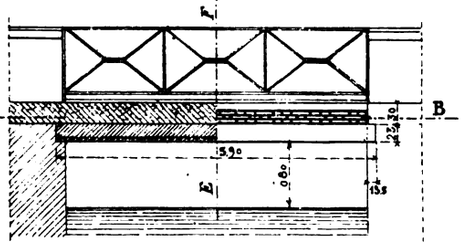



## TABLIER EN BÉTON ARMÉ POUR PONT-ROUTE

COUPE **EF**




COUPE **CD**




ÉLÉVATION

DEMIE COUPE HORIZONTALE SUIVANT **AB**

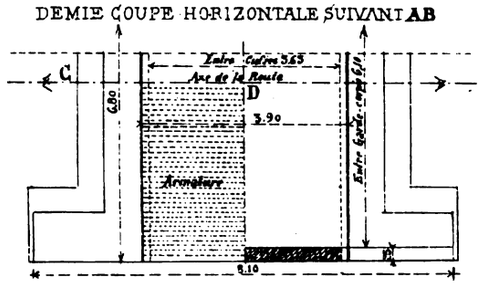
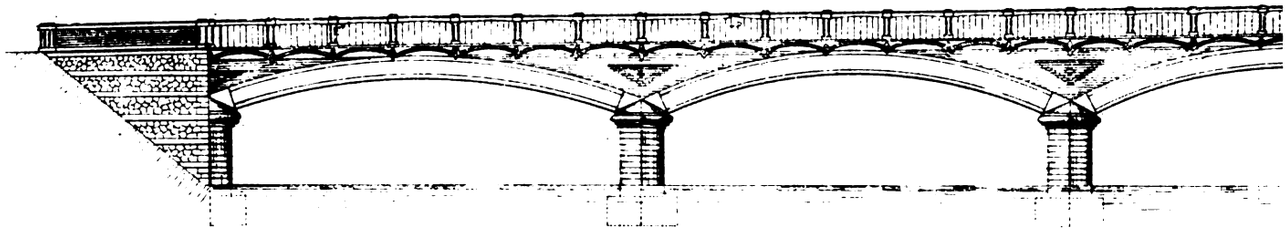



**Planche XXVII**

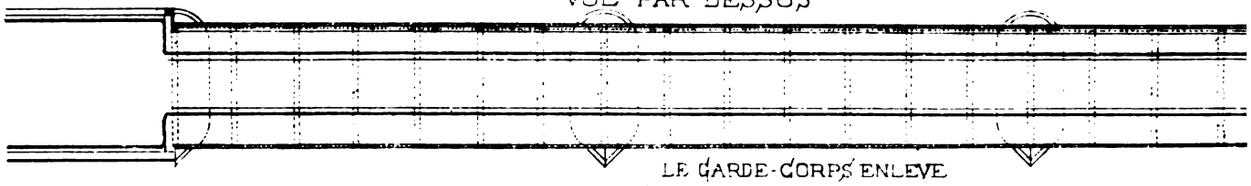
# PO

## PONT EN A

ÉLÉVATION CÔTE AMONT



VUE PAR DESSUS

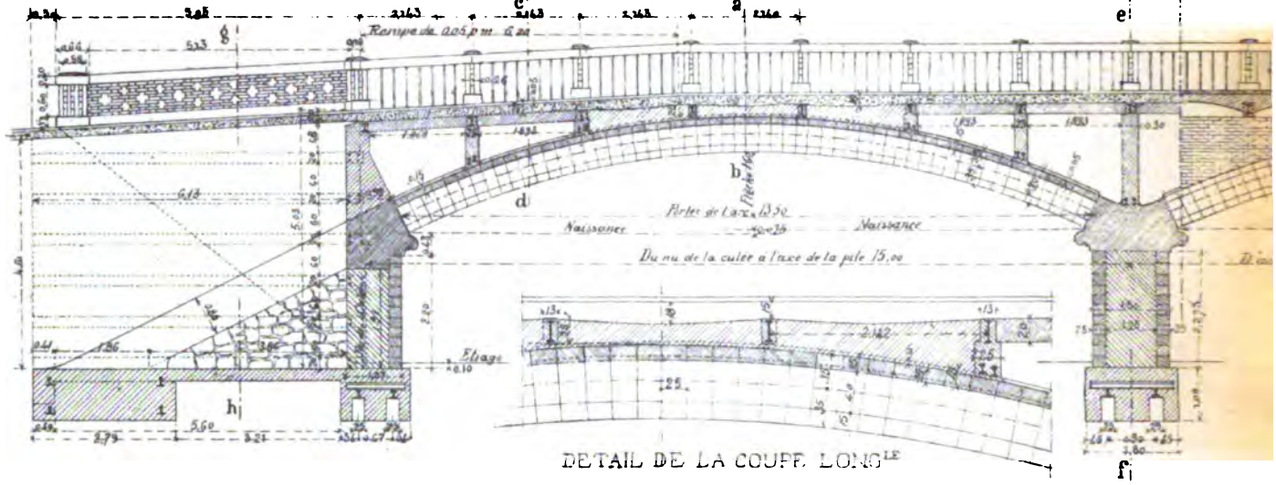


PL

LE GARDE-CORPS ENLEVÉ

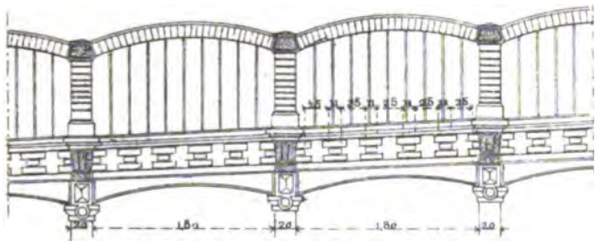
COUPE LONGITUDINALE SUIVANT L'AXE DU PONT

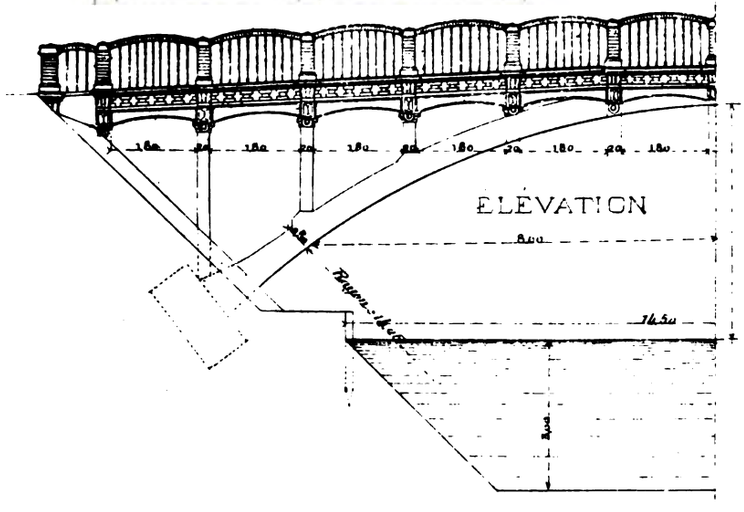
COUP



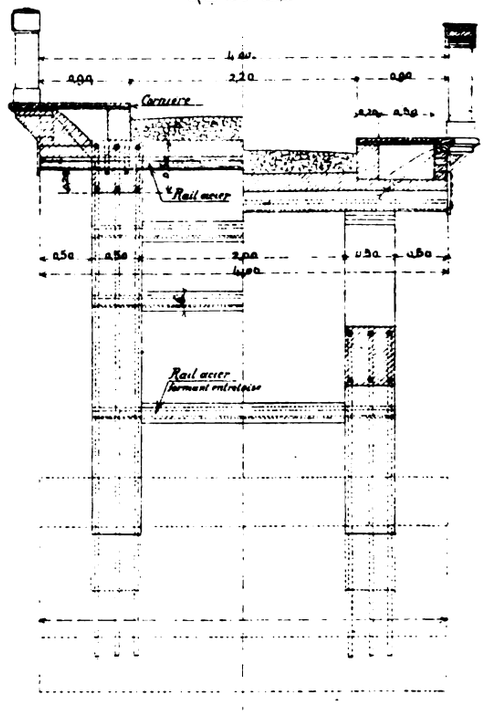

DÉTAIL DE LA COUPE LONGLE

## PONT EN ARC DE 20M DE PORTÉE ET 4M50 DE FLÈCHE POUR CHARIOT DE 8 TONNES



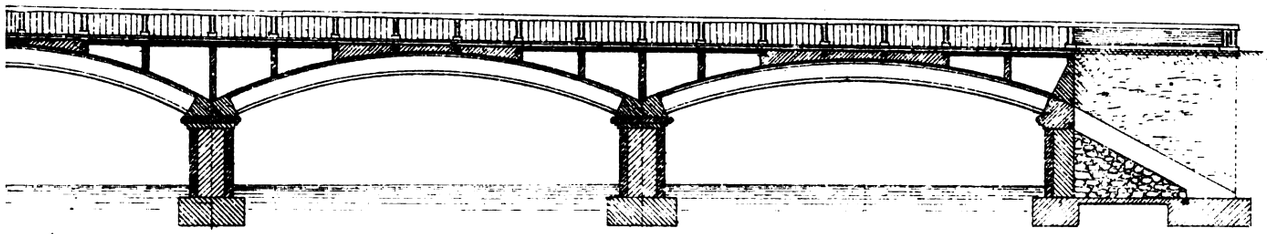



COUPES



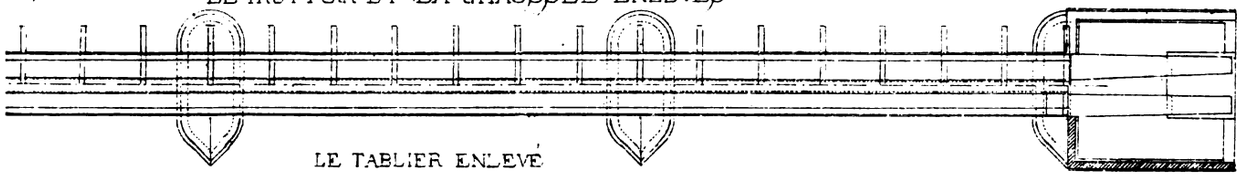
## C CREUX

COUPE SUR L'AXE DE LA CHAUSSÉE



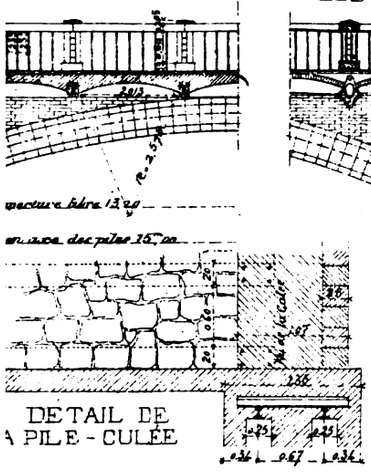
NS

LE TROTTOIR ET LA CHAUSSÉE ENLEVÉS



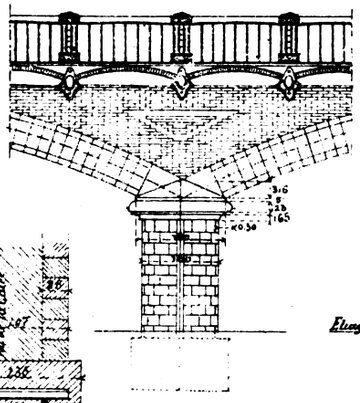
LE TABLIER ENLEVÉ

SUR LE TROTTOIR



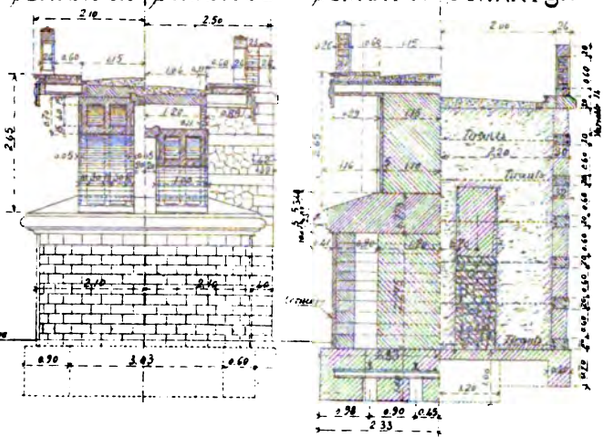
DETAIL DE
A PILE-CULÉE

ÉLÉVATION D'UNE PILE



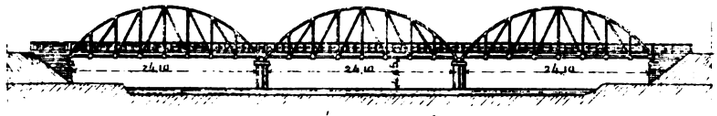
COUPES

SUIVANT **ab** | SUIVANT **cd** | SUIVANT **ef** | SUIVANT **gh**

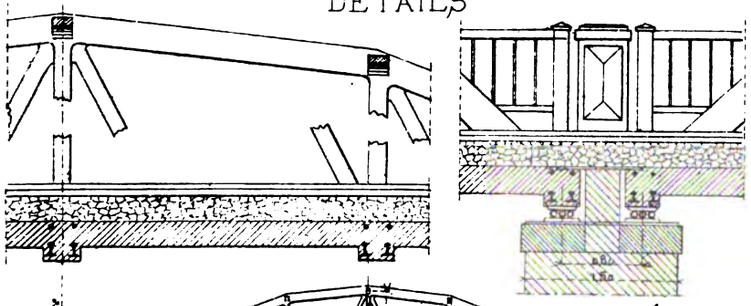


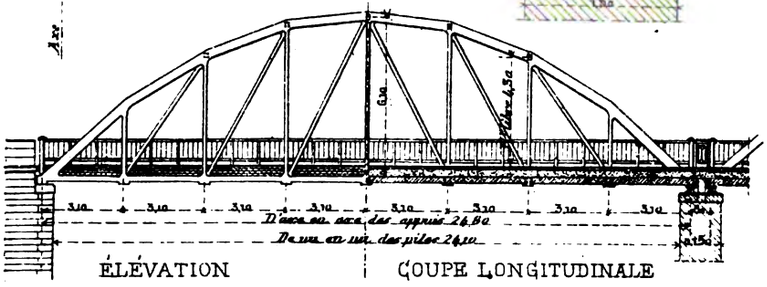
## PONT EN BOW-STRING

ÉLÉVATION D'ENSEMBLE



DÉTAILS

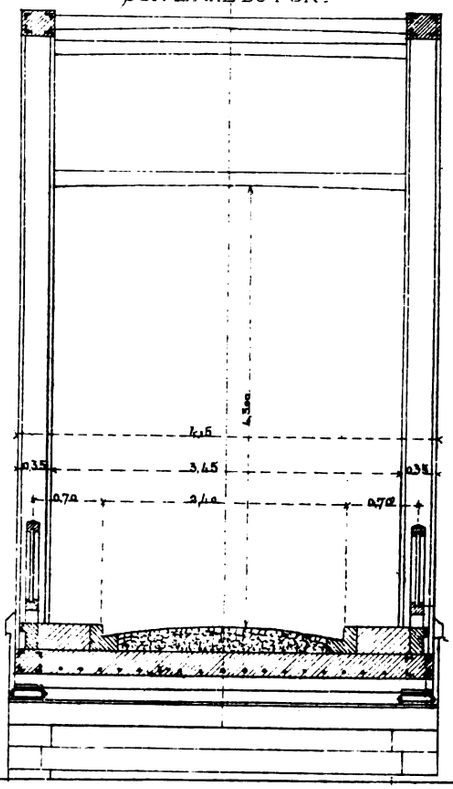




ÉLÉVATION

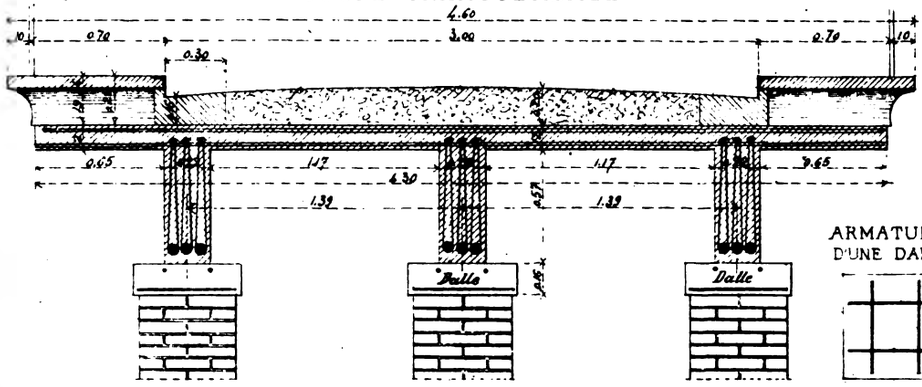
COUPE LONGITUDINALE

COUPE TRANSVERSALE
SUR L'AXE DU PONT

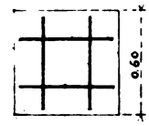


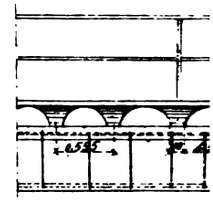
# PONT A TRAVÉES SUCCESSIVES INDÉPEND

COUPE TRANSVERSALE

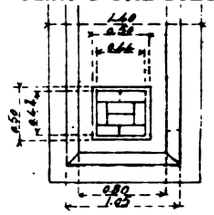



ARMATURE D'UNE DALLE

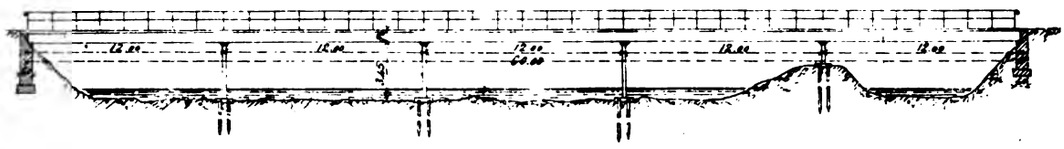


PLAN D'UNE PILE

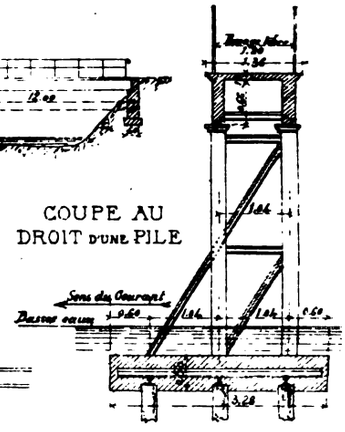


ÉLÉVATION

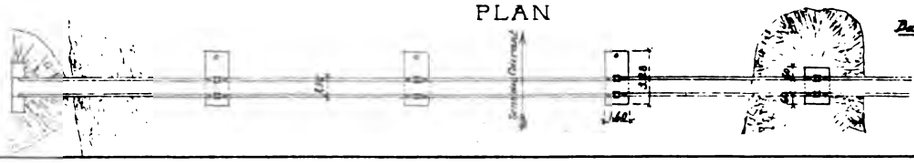



## PASSERELLE

COUPE AU DROIT D'UNE PILE

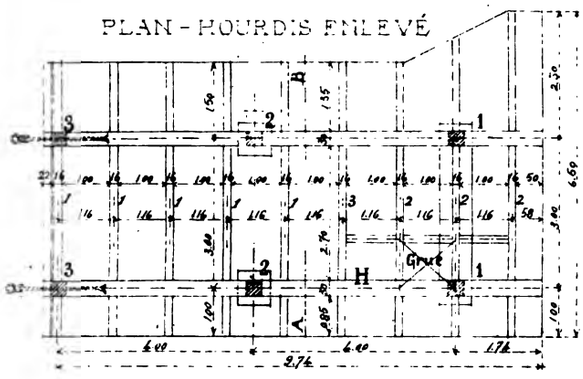



PLAN

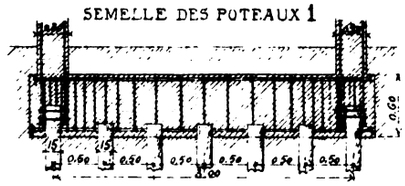


## APPONTEMENT

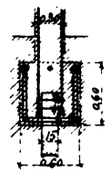
PLAN - HOURDIS ENLEVÉ



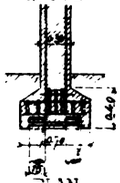

SEMELLE DES POTEAUX 1




COUPE




COUPE

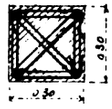



PLAN

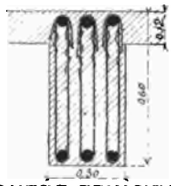
SEMELLE POTEAUX 2-3

DÉTAILS

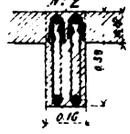
POTEAUX



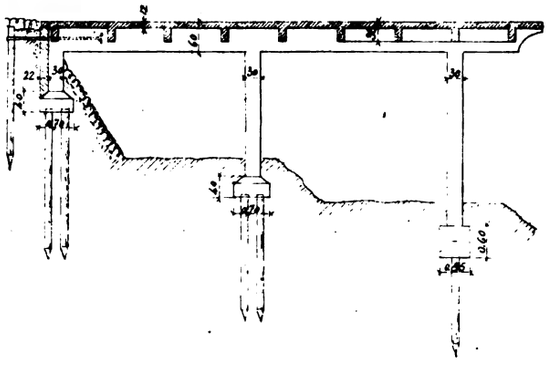

POUTRES PRINCIPALES N° 2



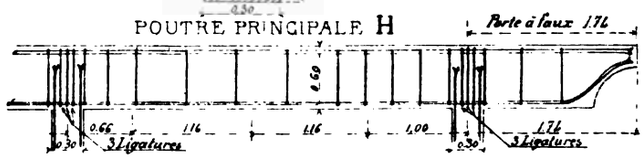

POUTRELLES N° 2



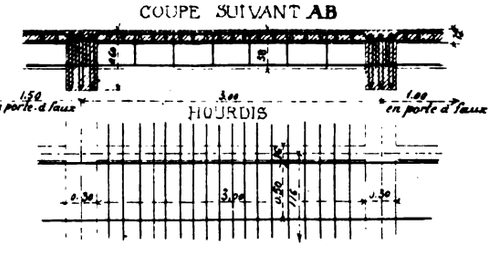

COUPE LONGITUDINALE

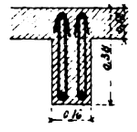



POUTRE PRINCIPALE H




COUPE SUIVANT AB



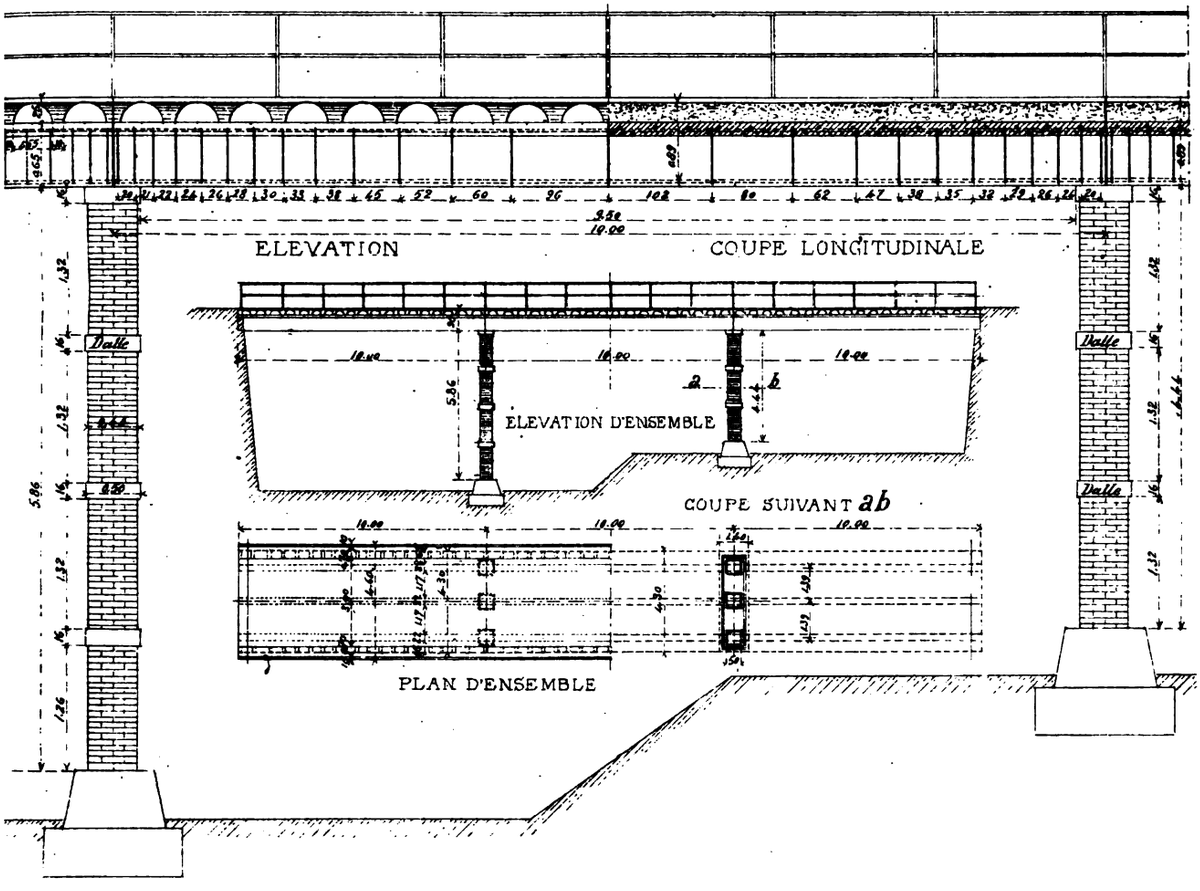




POUTRELLES N°1

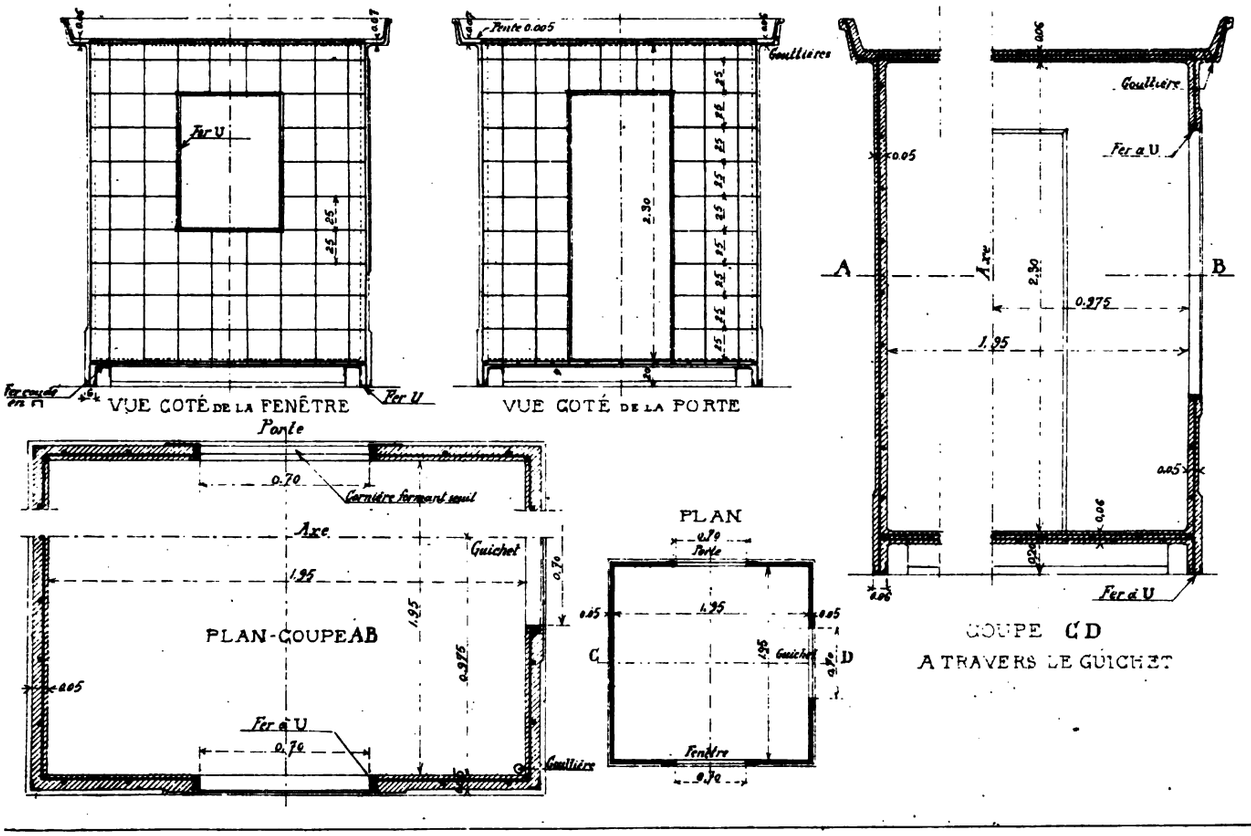
# DIVERS

*Ingénieur-Constructeur :* Mr P. PIKETTY

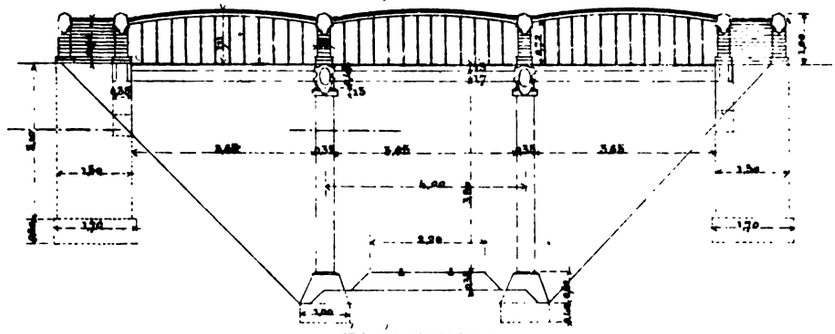
## ANTES AVEC PILES EN BRIQUES ARMÉES.




## BUREAU TRANSPORTABLE

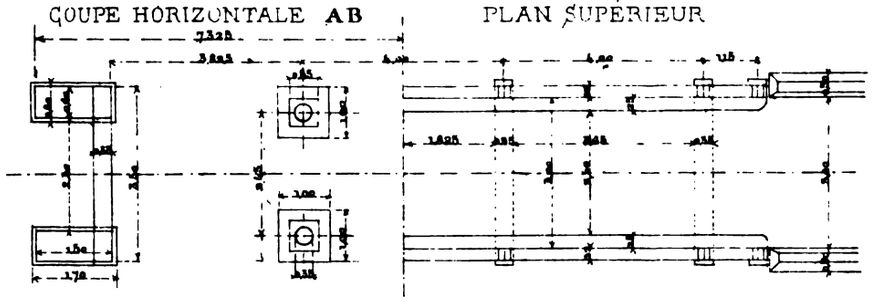


## PONT DROIT A TROIS TRAVÉES
## POUR PASSAGE SUPÉRIEUR D'UN CHEMIN VICINAL



ELÉVATION

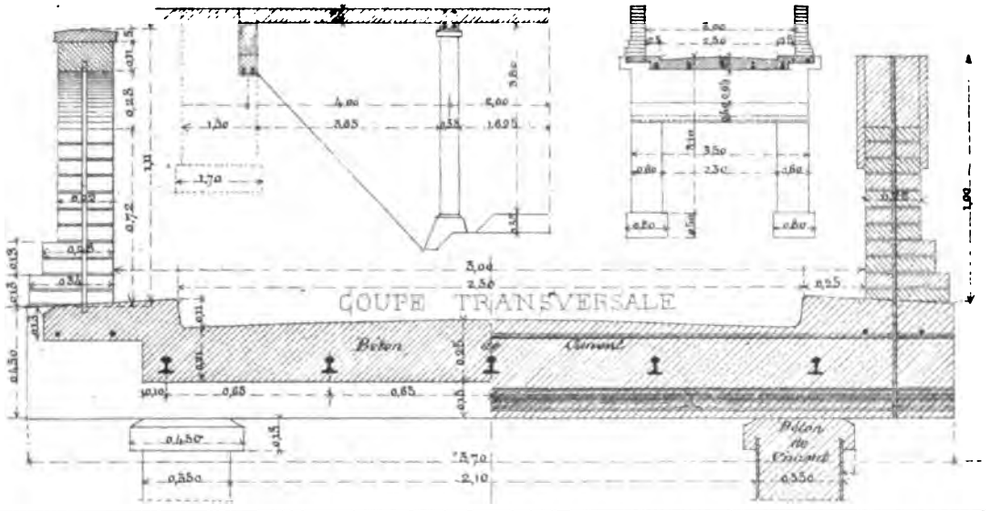
COUPE HORIZONTALE AB



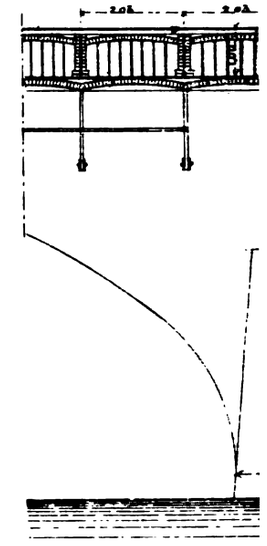
PLAN SUPÉRIEUR

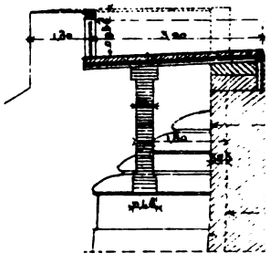
COUPE LONGITUDINALE SUR L'AXE

FACE D'UNE CULÉE

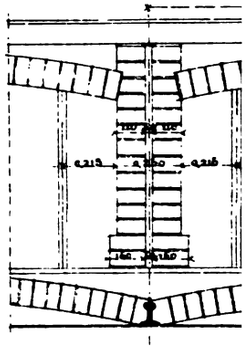



## ÉLARGIS

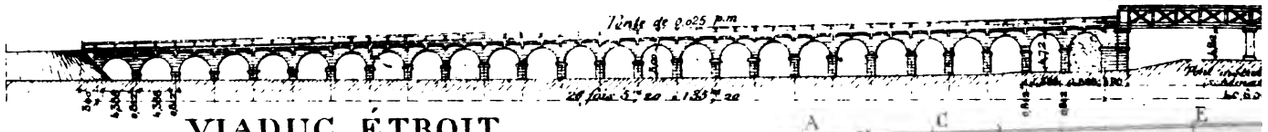




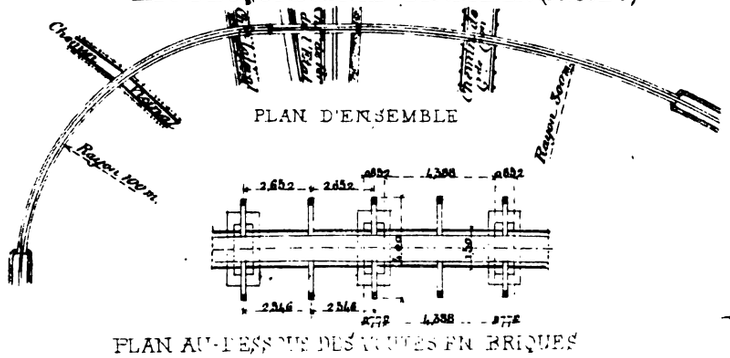
ELEVATION DU



ELÉVATION



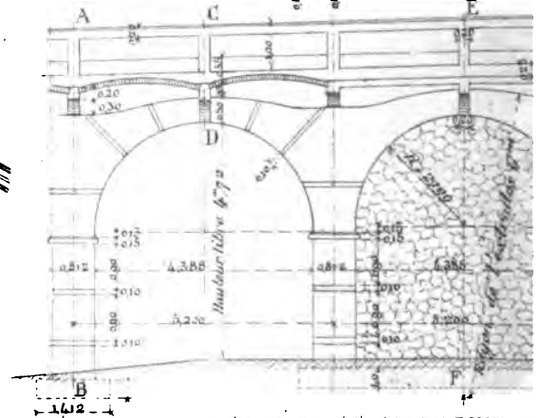

## VIADUC ÉTROIT
## EN MAÇONNERIE ARMÉE. (PROJET)




PLAN D'ENSEMBLE



PLAN AU-DESSUS DES VOUTES EN BRIQUES
DANS LA PARTIE CIRCULAIRE DE **300 M.** DE RAYON

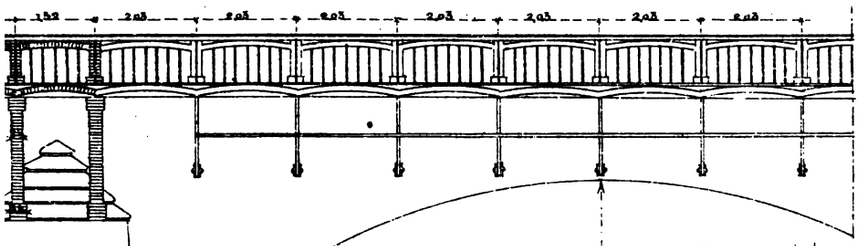


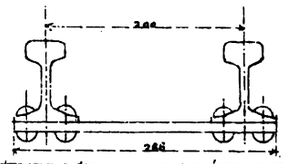

ELÉVATION DE LA CULÉE DE GAUCHE DU PONT N

# VIADUC

*Ingénieur* : Mr HAREL DE LA NOË
Ingénieur en chef des Ponts et Chaussées de la Sarthe
*Constructeur* : Mr P. PIKETTY

## SEMENT DU PONT DE PONTLIEUE SUR L'HUISNE - VILLE DU MANS

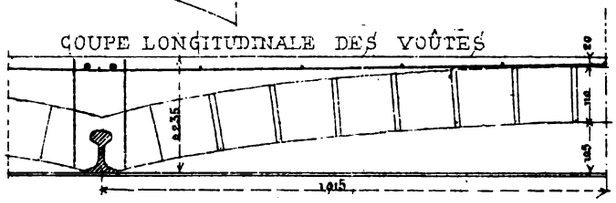


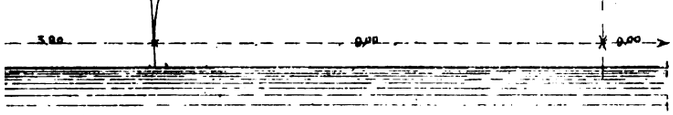


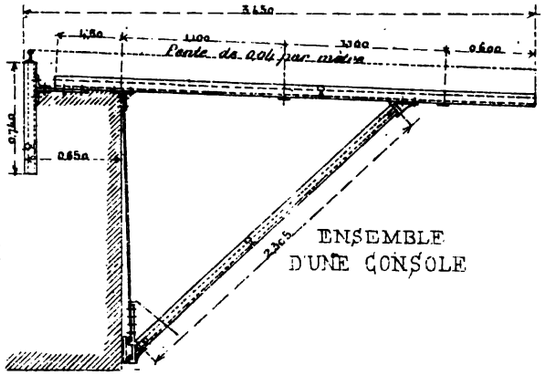
ASSEMBLAGE DE LA MAIN-COURANTE AU MILIEU DE CHAQUE VOÛTE

ÉLÉVATION

COUPE LONGITUDINALE DES VOÛTES

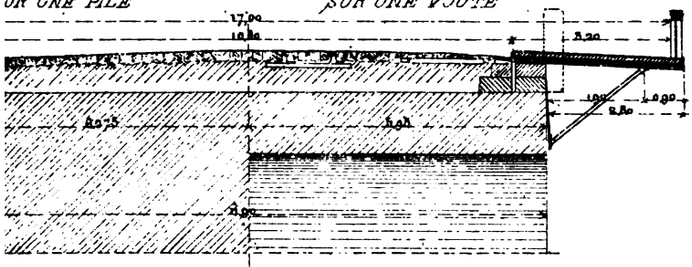




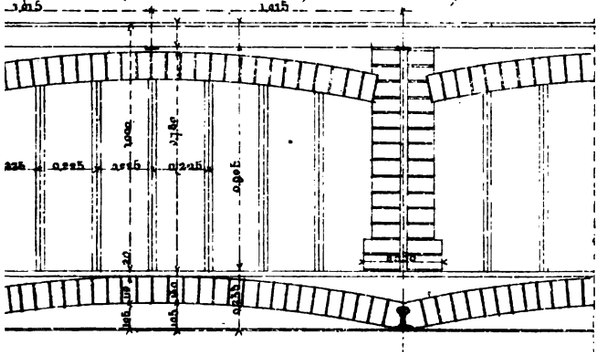



COUPES TRANSVERSALES

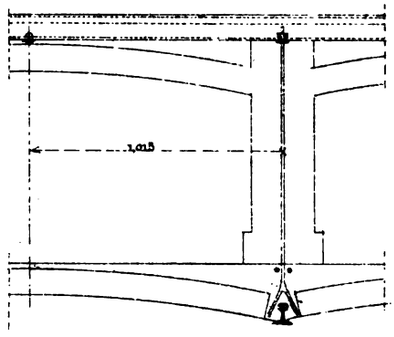
*SUR UNE PILE* *SUR UNE VOÛTE*



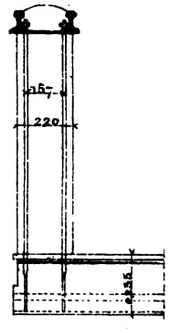
GARDE-CORPS ET DES TYMPANS



COUPE LONGITUDINALE DU GARDE-CORPS

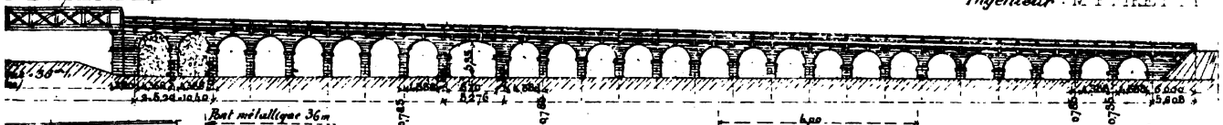


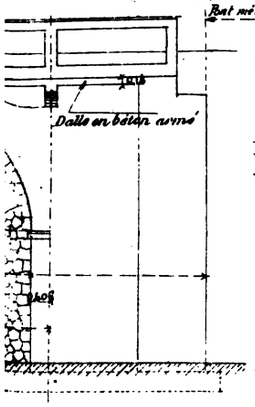
COUPE SUR UN MONTANT



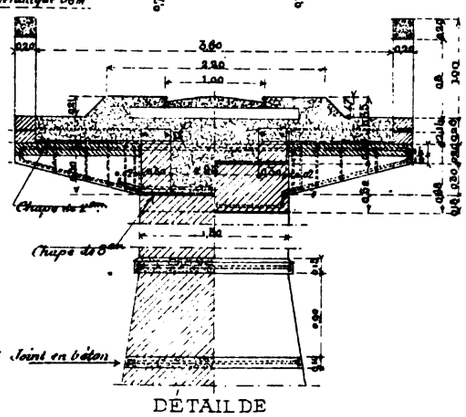
D'ENSEMBLE

*Ingénieur* : Mr PIKETTY

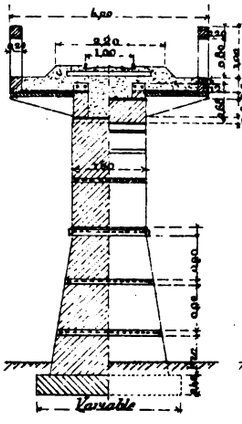




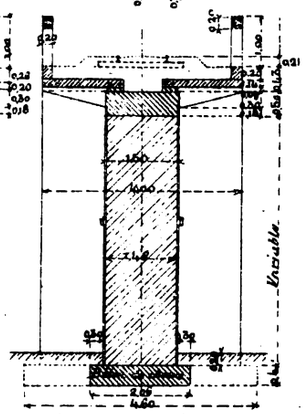

ÉTALLIQUE




DÉTAIL DE LA COUPE TRANSVLE AB.CD




COUPE TRANSVLE AB.CD

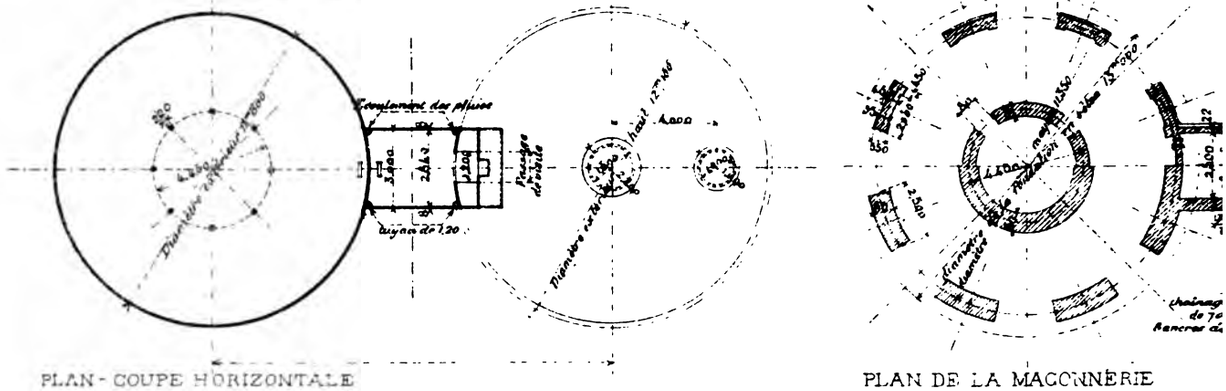



COUPE TRANSVLE EF

**Planche XXX.**

# RÉSERVOIRS ACCOUPLÉS DE 1000 M³

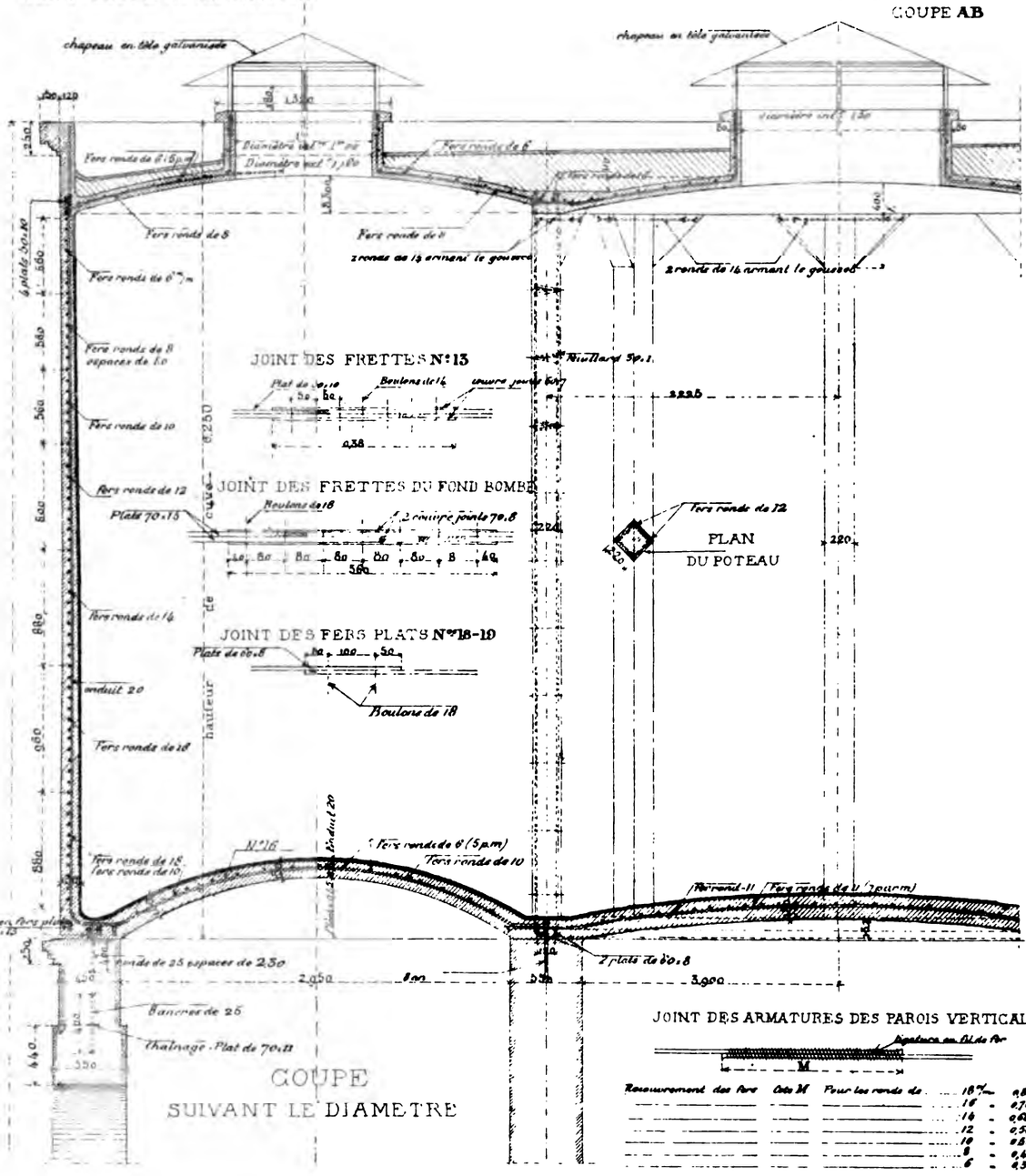
## VILLE DE LA MADELEINE




PLAN - COUPE HORIZONTALE

PLAN DE LA MAÇONNERIE

COUPE **AB**

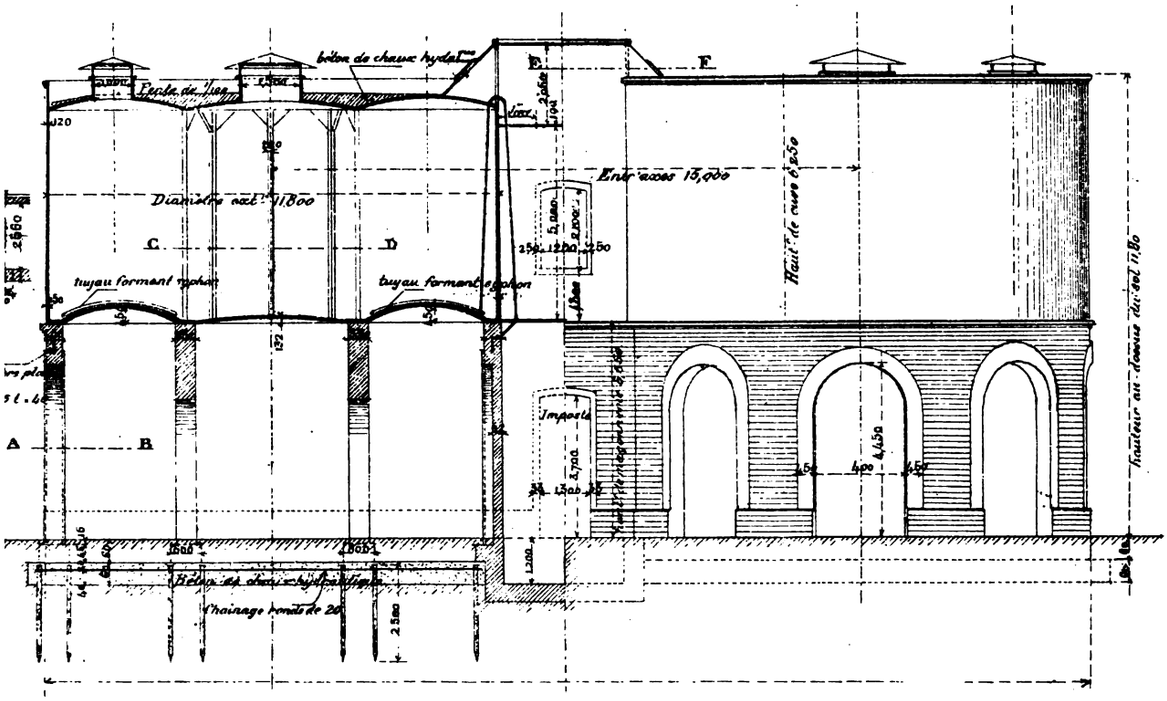



ASSEMBLAGE DES PAROIS DU RÉSERVOIR ET DES CLOISONS DE LA CHAMBRE DES VANNES

JOINT DES ARMATURES DES PAROIS VERTICALES

# RVOIRS

*Ingénieur* : Mr BOUSSIRON
*Entrepreneur* : Mr ORANIE · L'HOST




## CUVES ACCOUPLÉES

Propriété de Mr J. à Ponteilla

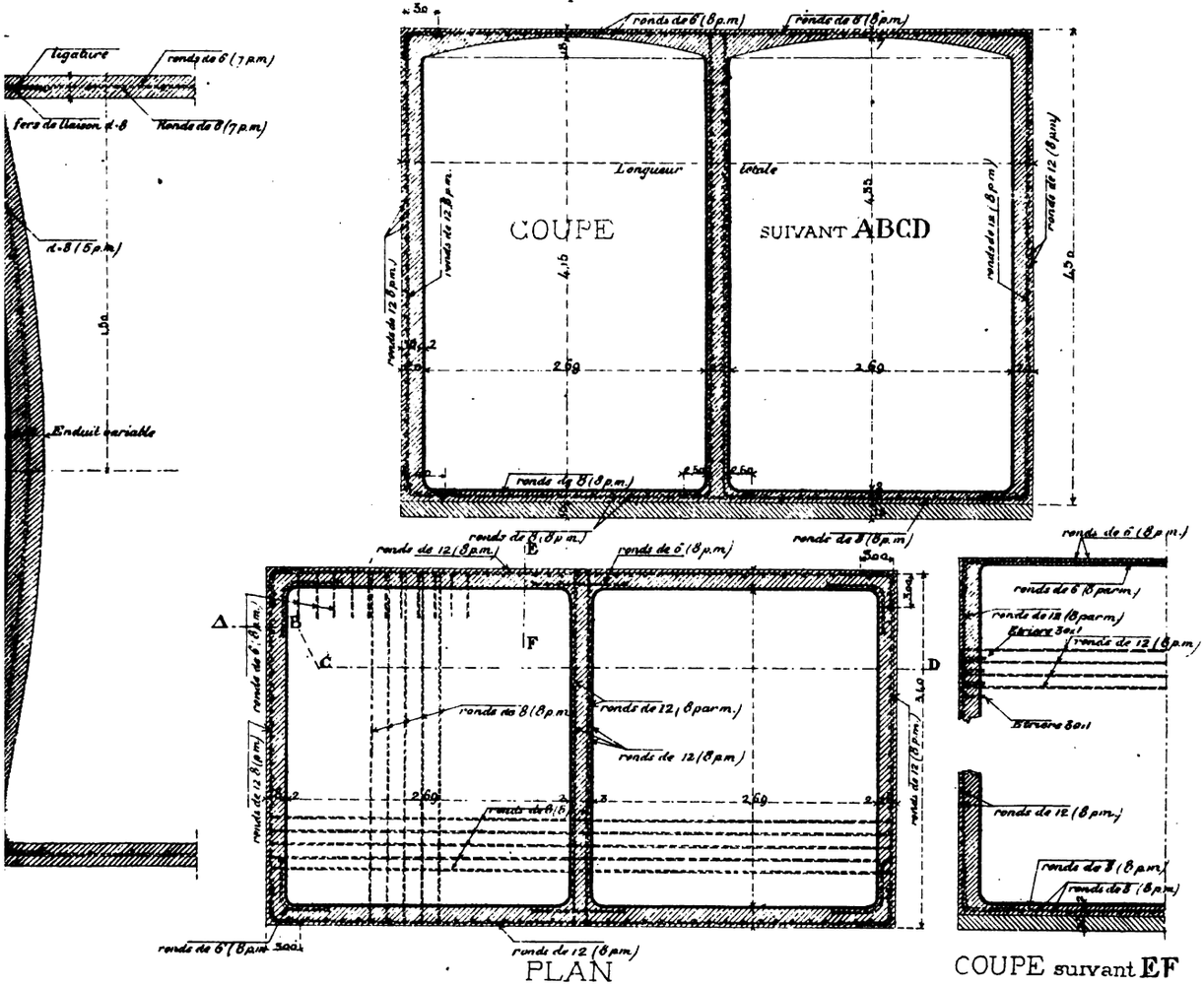
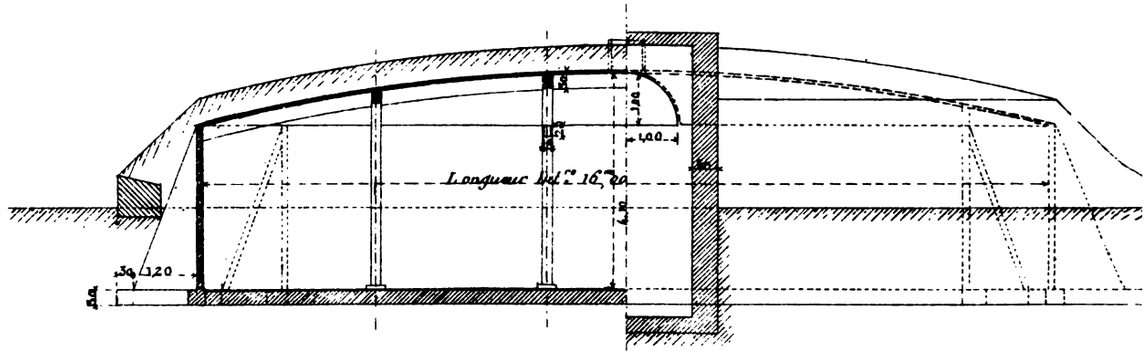
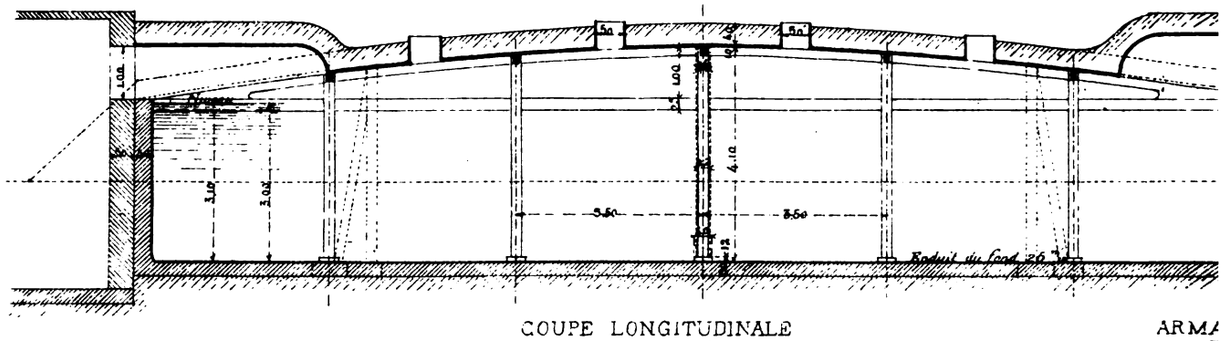



**Planche XXI.**



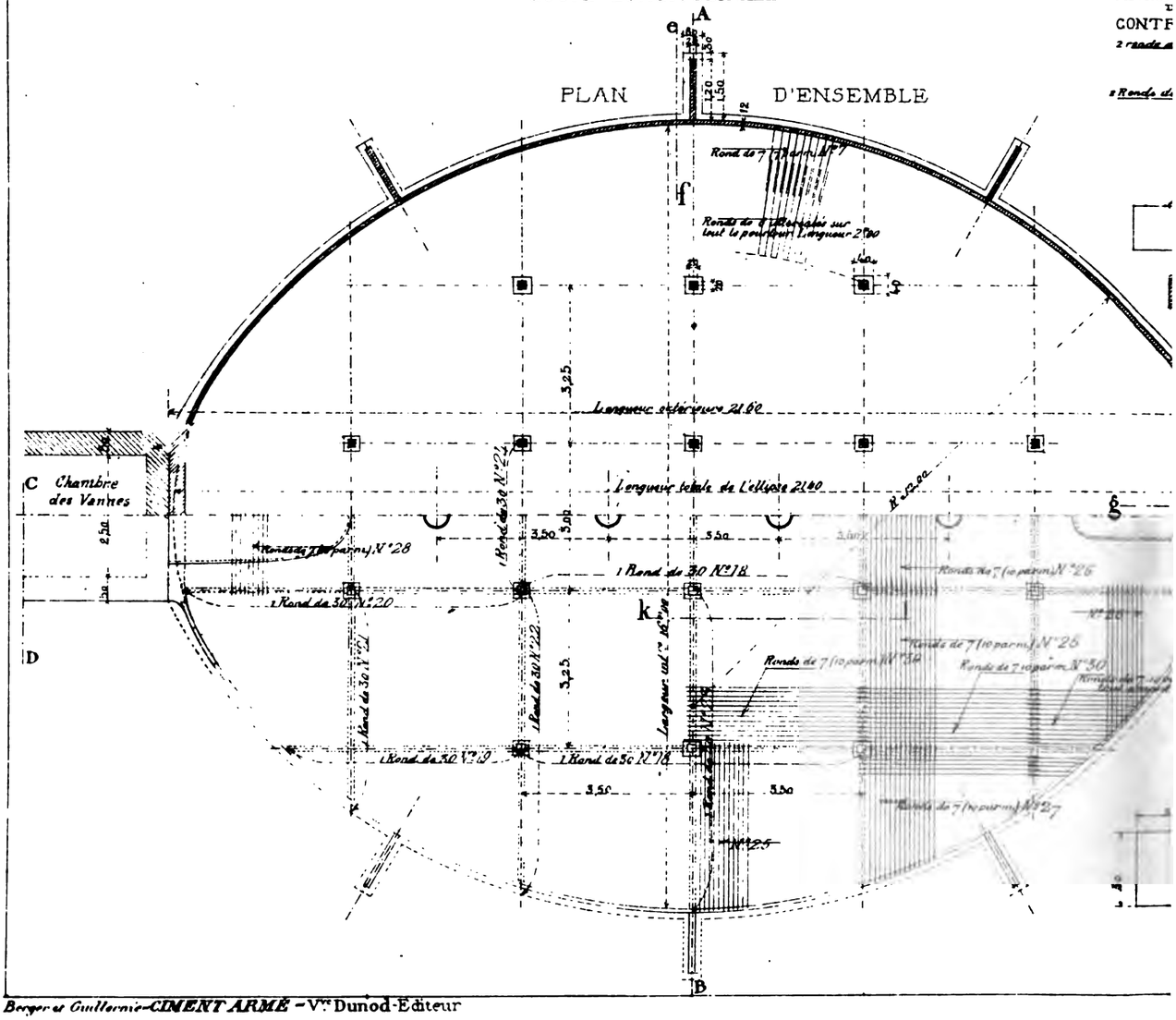

COUPE SUIVANT **ABCD**




COUPE LONGITUDINALE

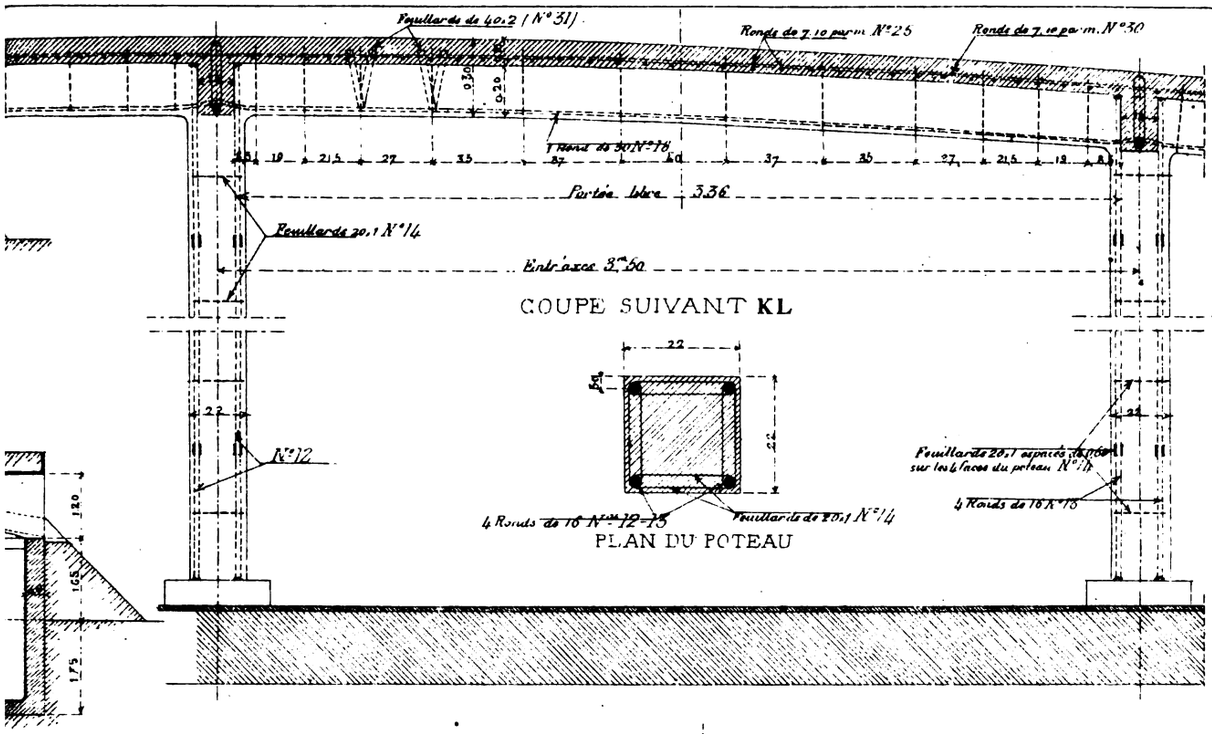
ARMA
CONTF

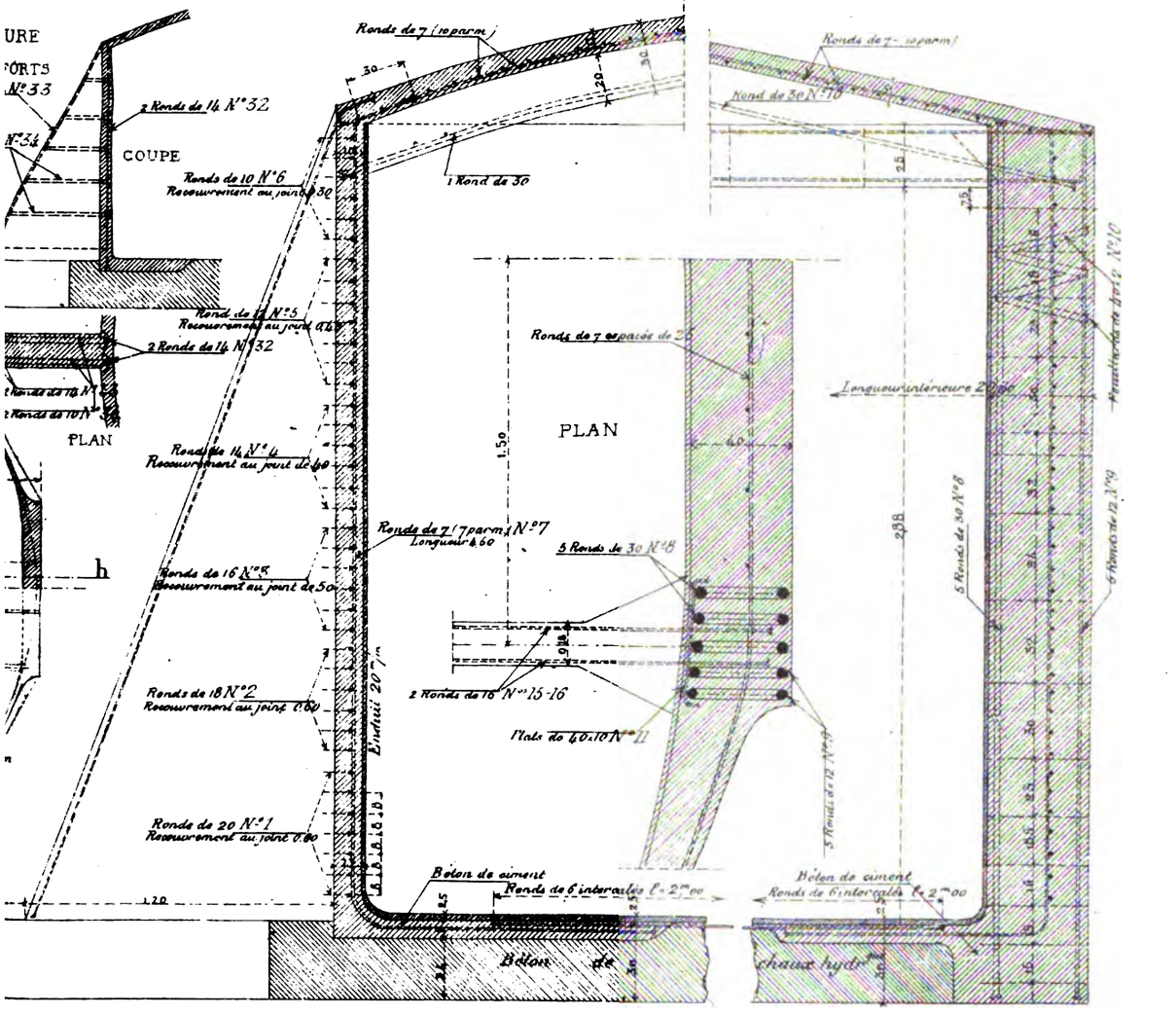
PLAN D'ENSEMBLE



# ERVOIR DE 800 M³ A GARCHES

*Ingenieur-Constructeur* - M. BOUSSIRON



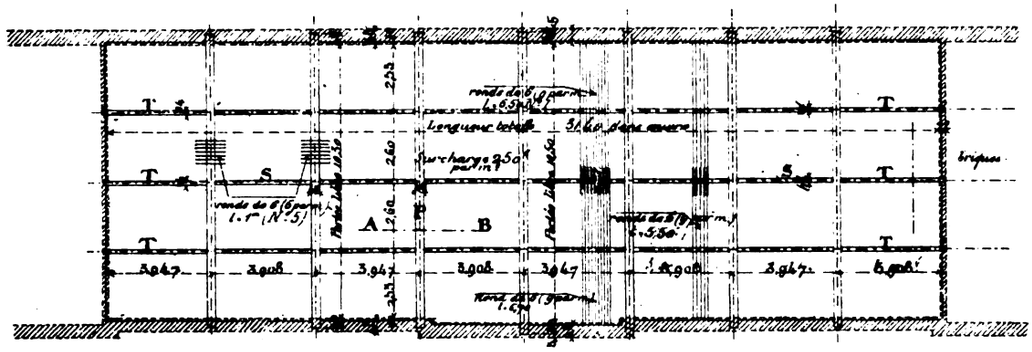

COUPE SUIVANT ef

COUPE SUIVANT gh

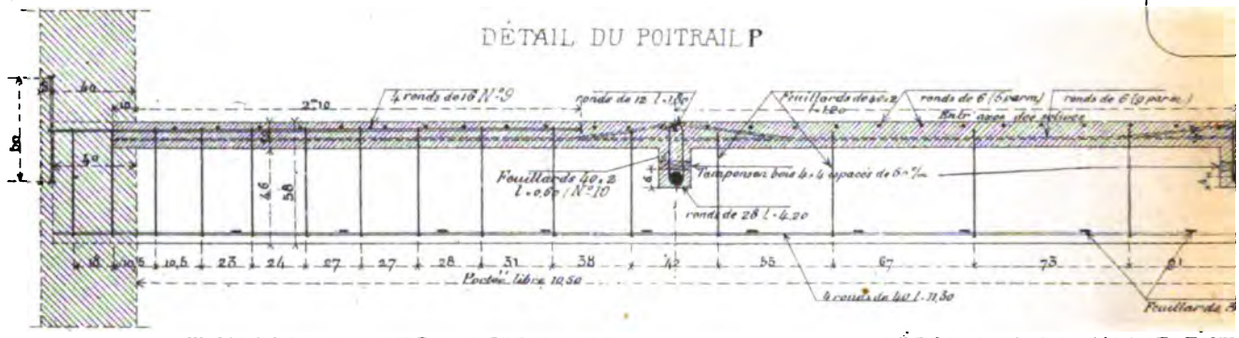
**Planche XXXII**

# ÉCOLE RUE DES BRASSERIES . CHÂLONS s/ MARNE

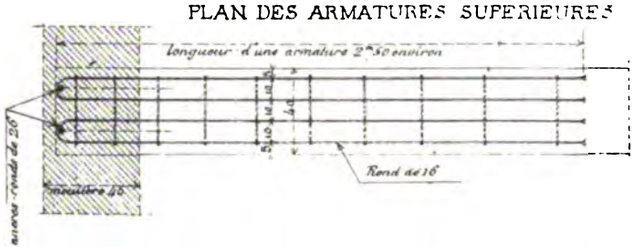
## PLANCHER DES CLASSES



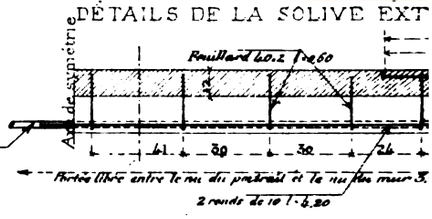

PLAN DU PLANCHER



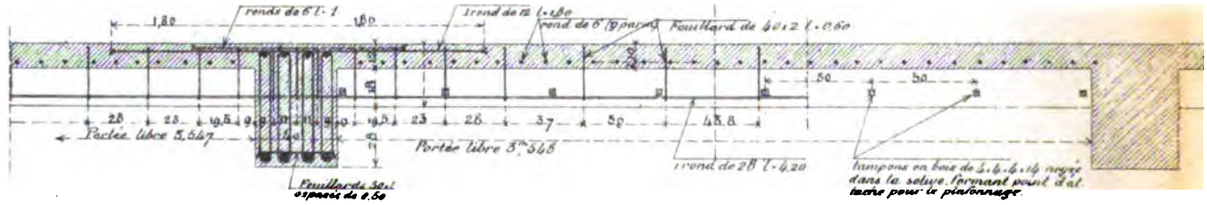

PLAN DES ARMATURES SUPERIEURES



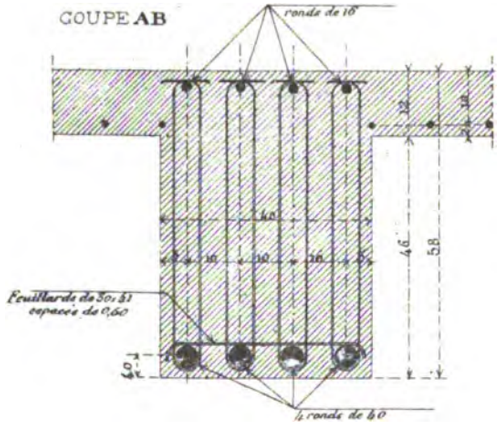

DÉTAILS DE LA SOLIVE EXT



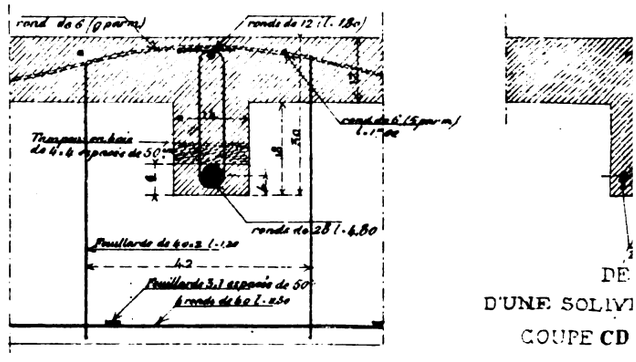

DÉTAILS DE LA SOLIVE S




COUPE AB




COUPE D'UNE SOLIVE S

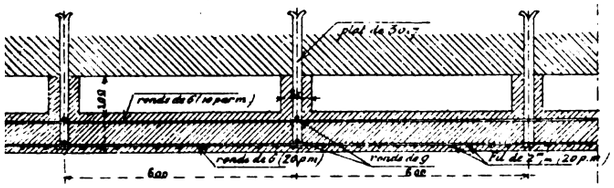



DÉ
D'UNE SOLIVE
COUPE CD

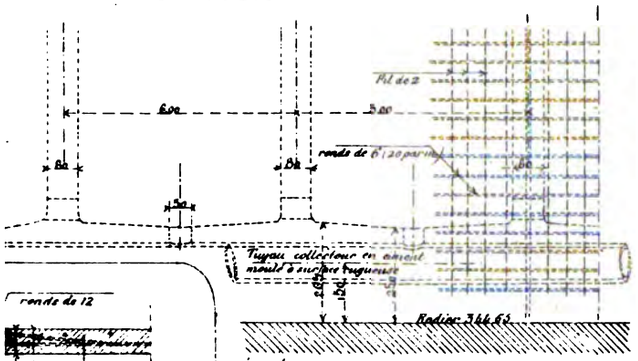
# ITEMENT DE DIGUE

*Ingénieur-Constructeur:* Mr BOUSSIRON
*Entrepreneur:* Mr LEMONNIER

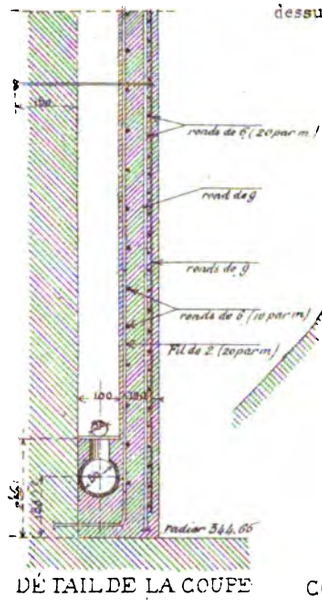
## RESERVOIR DE LA MOUCHE . PRÈS LANGRES
## ECRAN PROTECTEUR DES INFILTRATIONS




PLAN DE LA PARTIE INFÉRIEURE

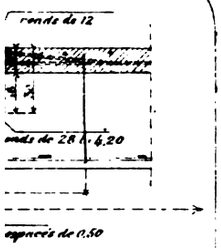



ÉLÉVATION DE LA PARTIE INFRE

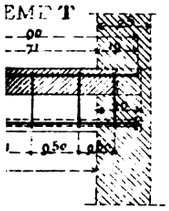


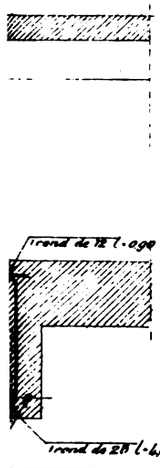

DÉTAIL DE LA COUPE
PARTIE INFÉRIEURE

COUPE D'ENSEMBLE

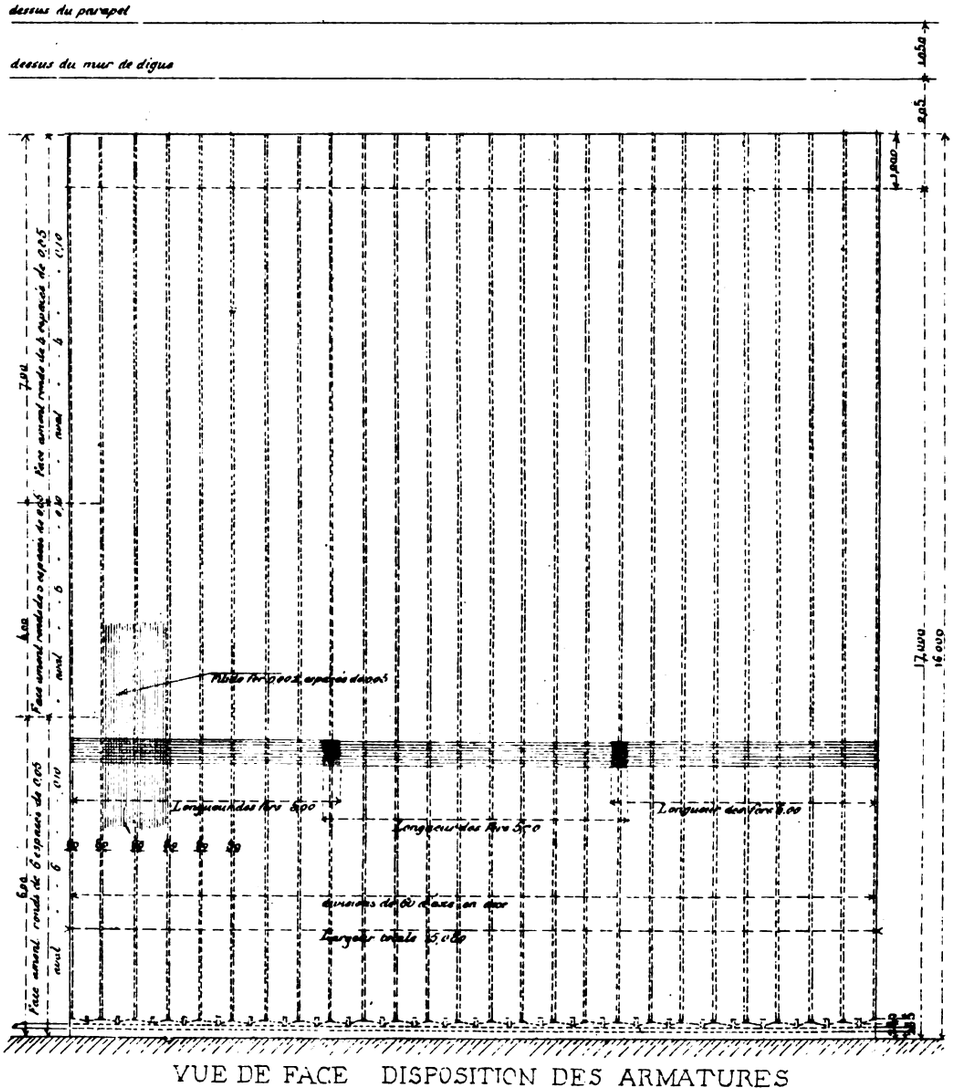



EME T



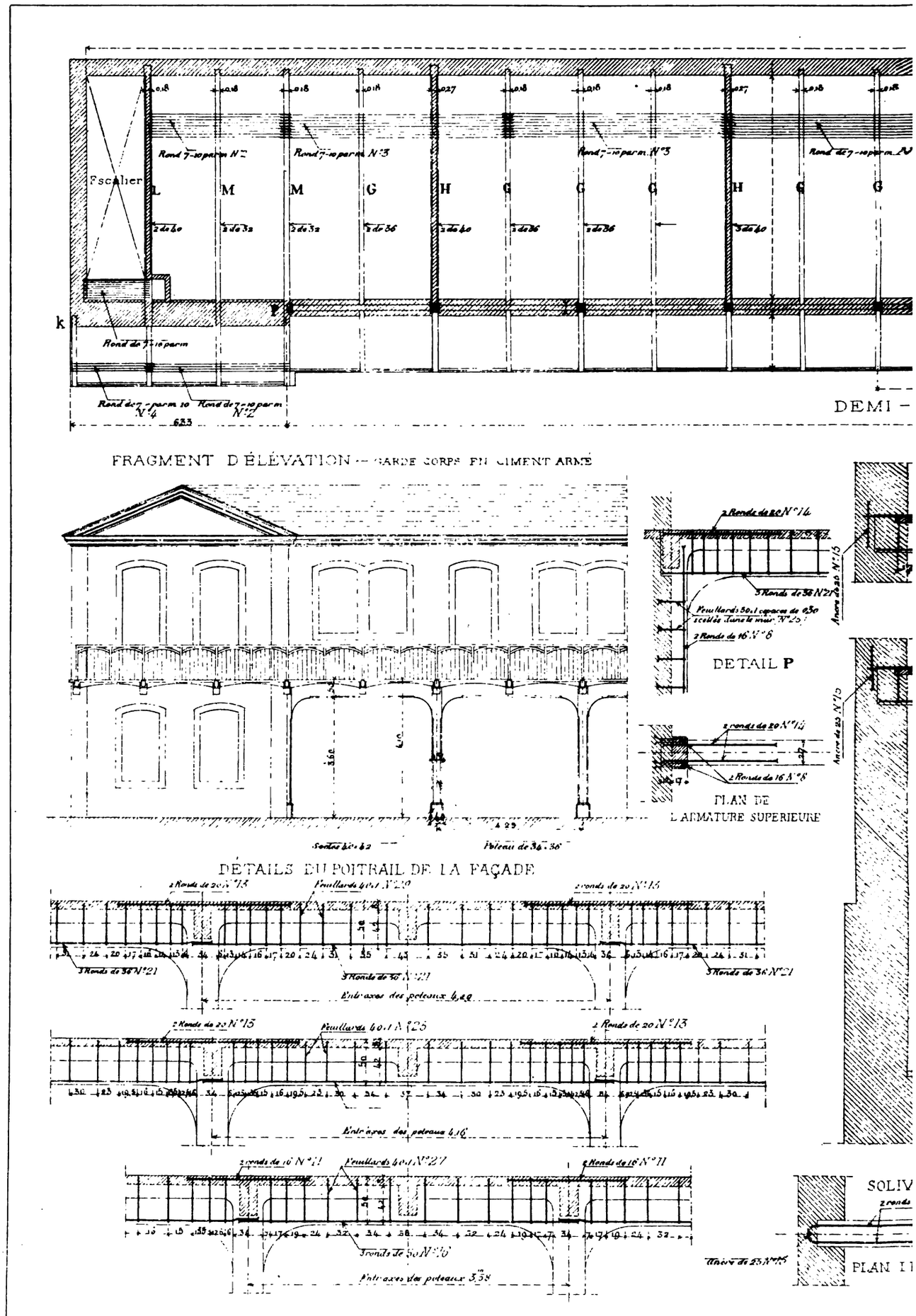



AIL
EXTRÈME T
U PLAN




VUE DE FACE DISPOSITION DES ARMATURES

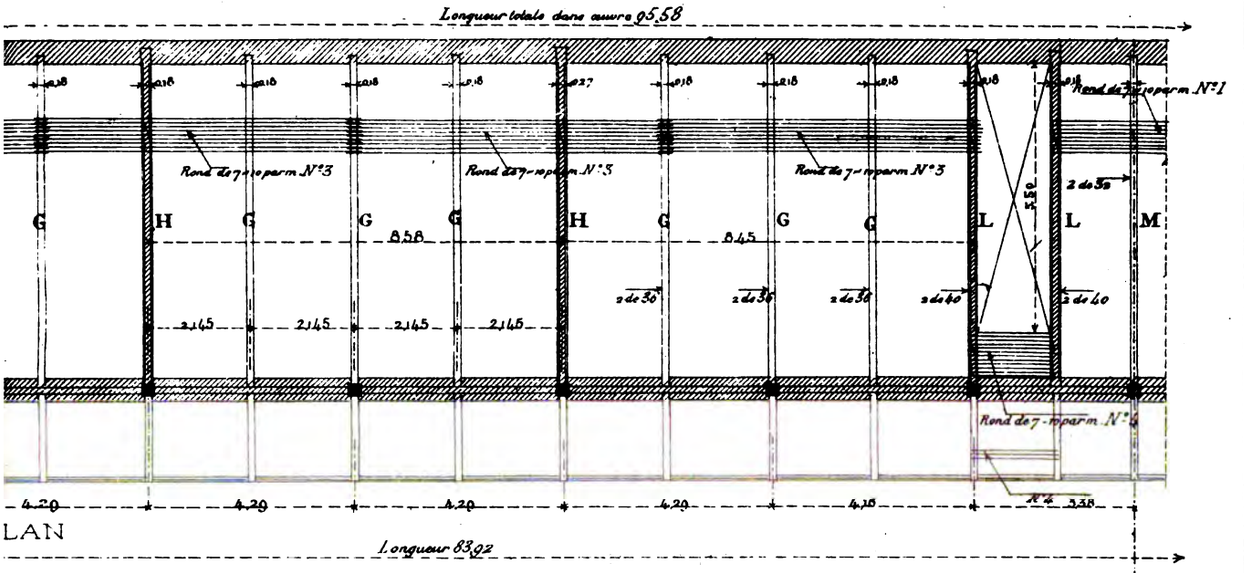
**Planche XXXIII.**




Berger et Guillerme. CIMENT ARMÉ — Vve Dunod-Éditeur

# ...S PUPILLES DE LA VILLENEUVE - FINISTÈRE

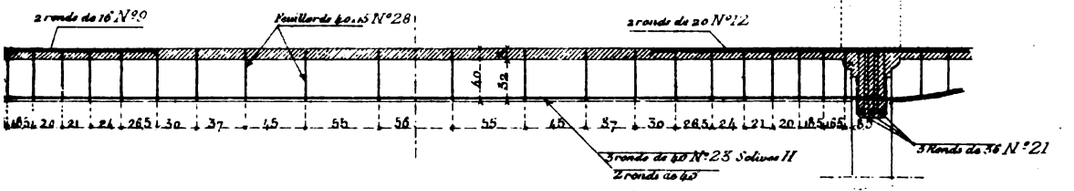
*Ingénieur Constructeur* M^r BOUSSIRON



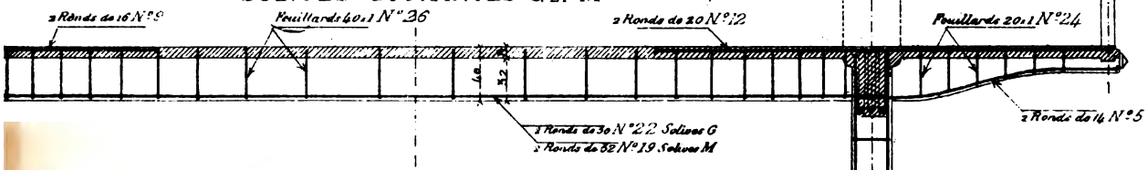

PLAN

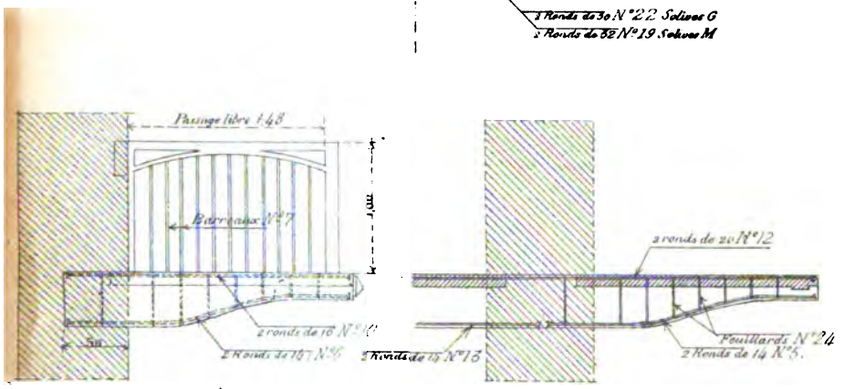
Longueur 83.92

SOLIVES SOUS CLOISONS H ET L



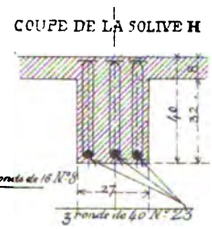

SOLIVES COURANTES G ET M



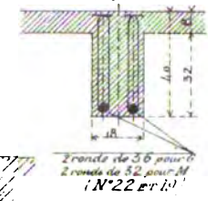

CONSOLES EXTRÊMES K

CONSOLE ET SOLIVE M

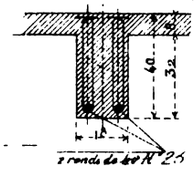



COUPE DE LA SOLIVE H

COUPE DES SOLIVES G ET M

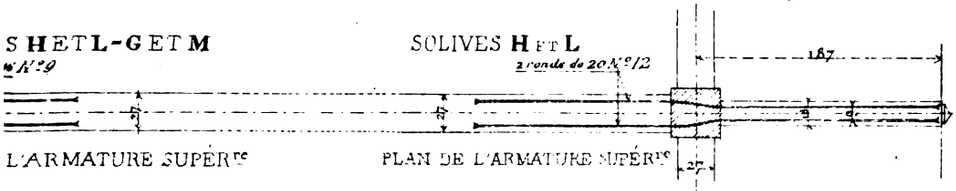



COUPE DE LA SOLIVE L ESCALIERS




S H ET L - G ET M

N°9

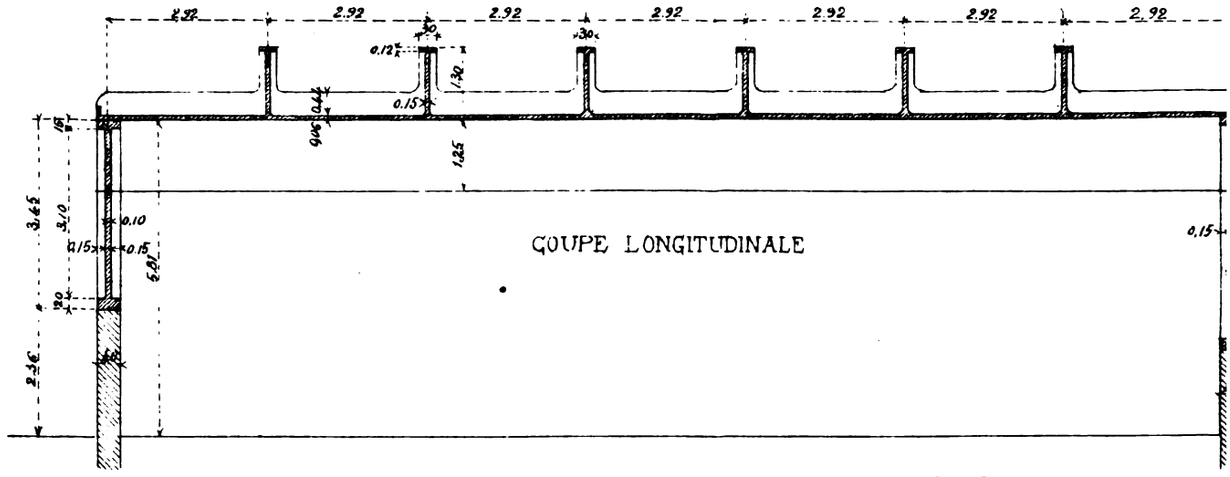



L'ARMATURE SUPÉR^{re}

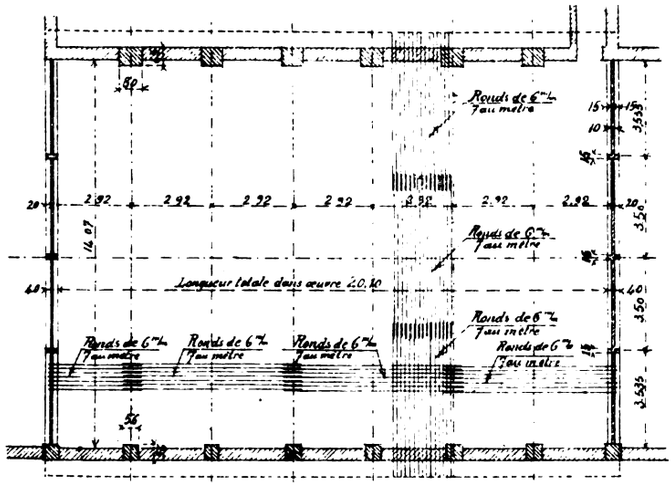
PLAN DE L'ARMATURE SUPÉR^{re}

**Planche XXXIV.**

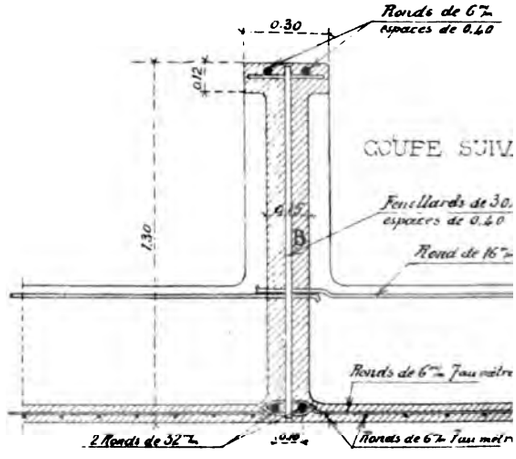
# COUVERTURE




PLAN

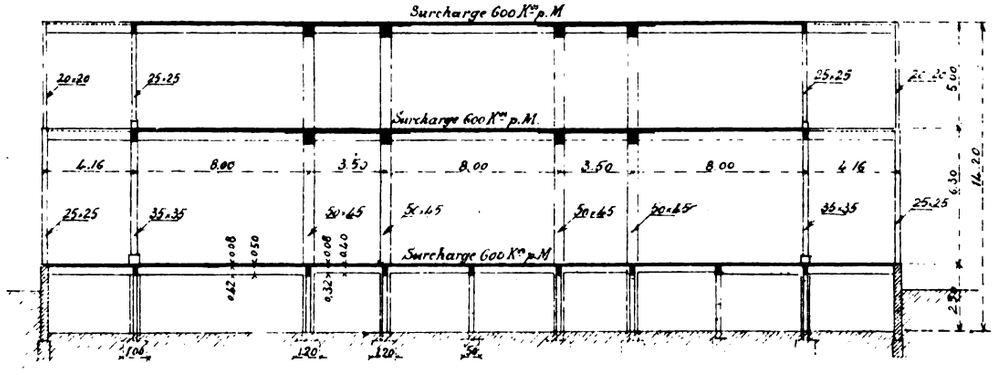


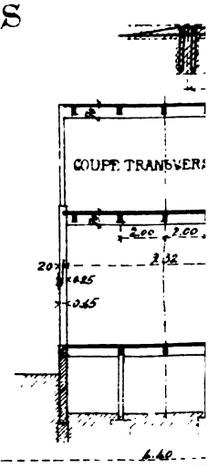

## SOCIÉTÉ DES HUILE



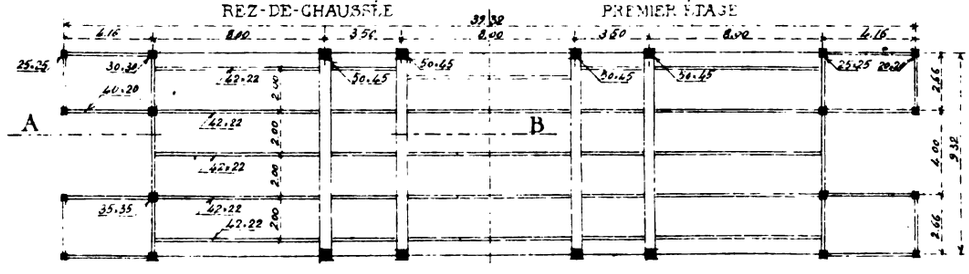

## EXPOSITION UNIVERSELLE DE 1900 – RESTAURANT DES CONGRÈS

COUPE LONGITUDINALE
Surcharge 600 K^m p. M



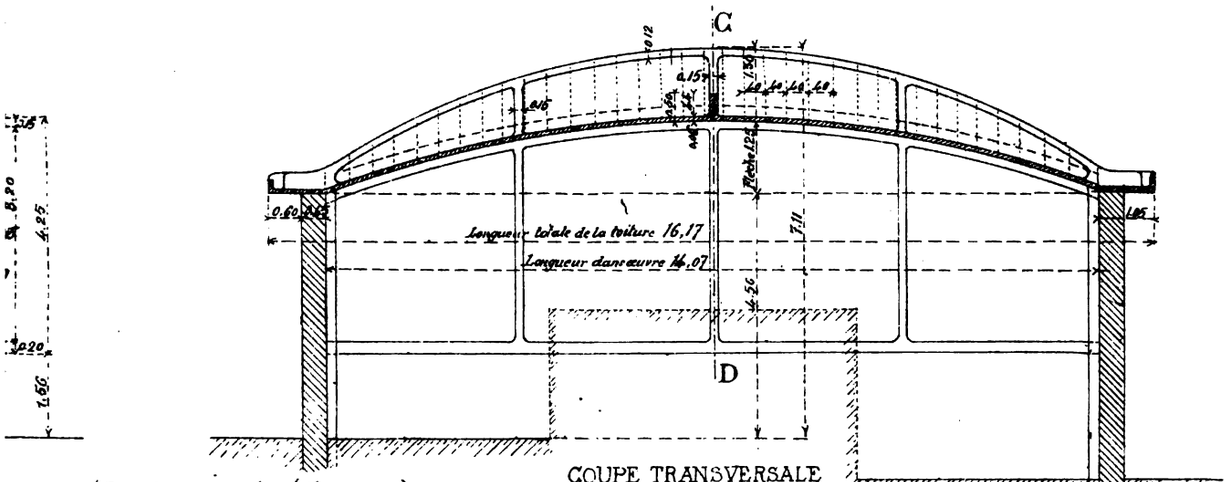




POTEAUX ET PLANCHER HAUT DU
REZ-DE-CHAUSSÉE — PREMIER ÉTAGE



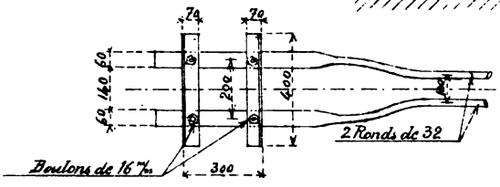
# PLANCHERS.

*Ingénieur-Constructeur :* Mr BOUSSIRON




## DE COLOMBES. (SEINE)

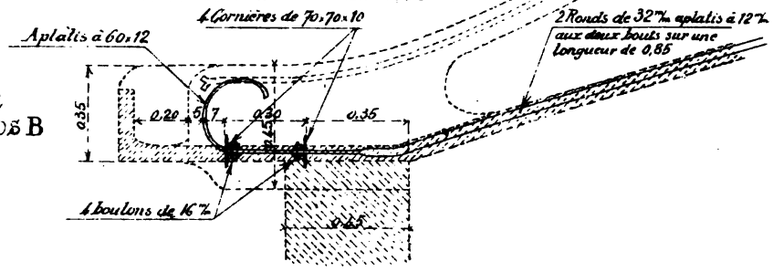
COUPE TRANSVERSALE



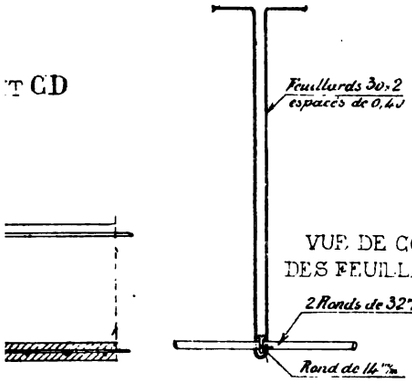

2 Ronds de 20 m/m

VUE EN PLAN

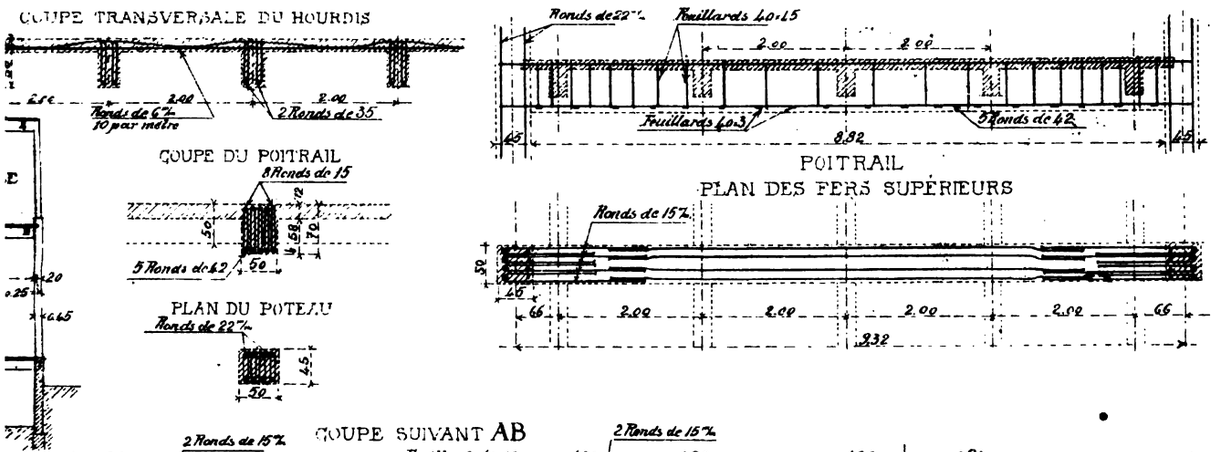
DÉTAIL DES ARMATURES-COUPE



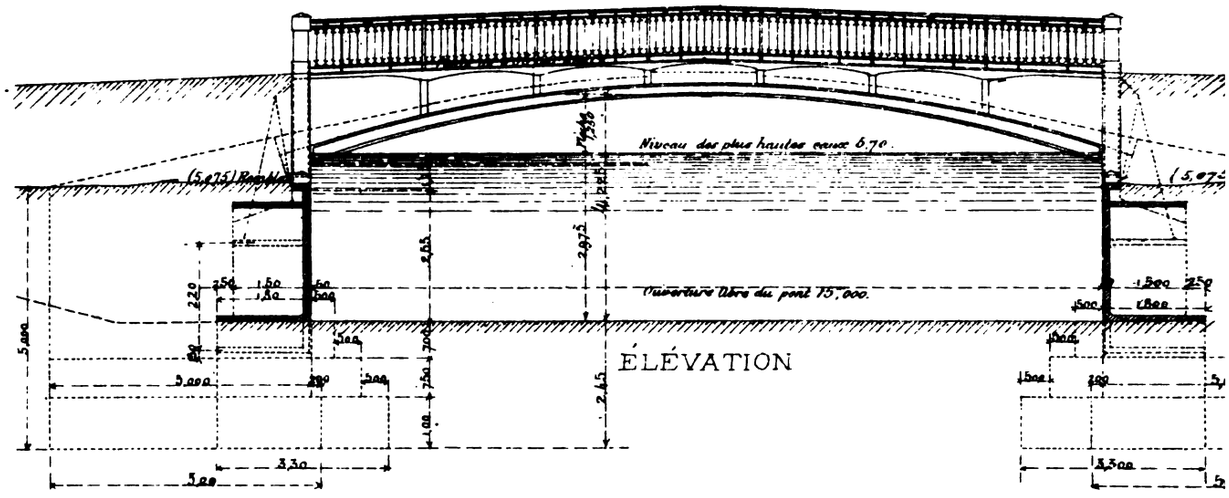

T CD



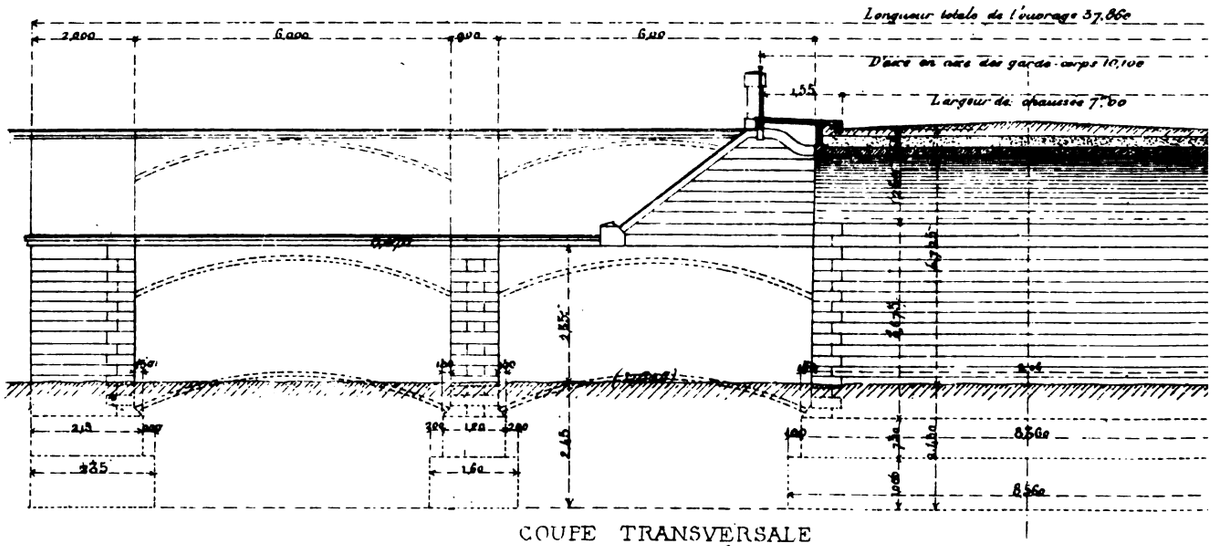

VUE DE COTÉ DES FEUILLARDS B



# PONT AU DROIT DE LA RUE

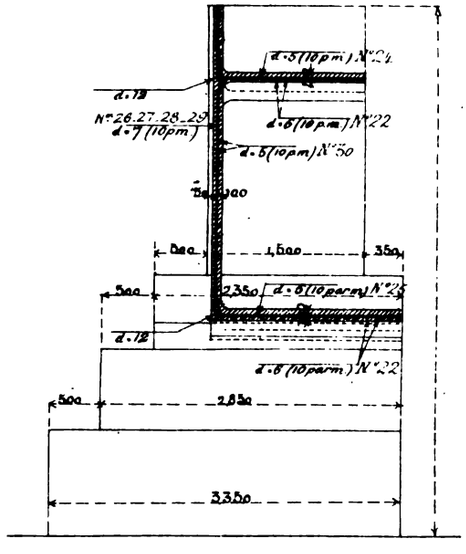



ÉLÉVATION

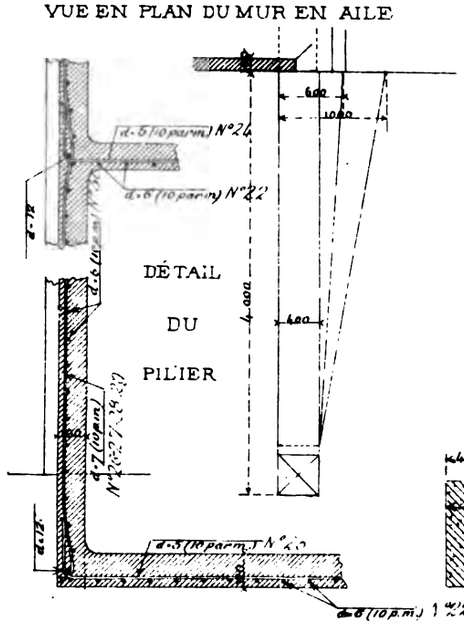


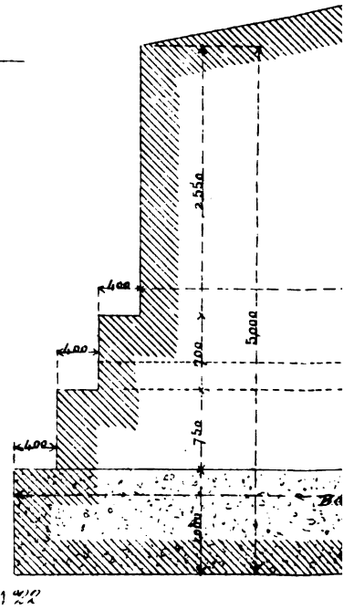

COUPE TRANSVERSALE

PROFIL D'UN PILIER



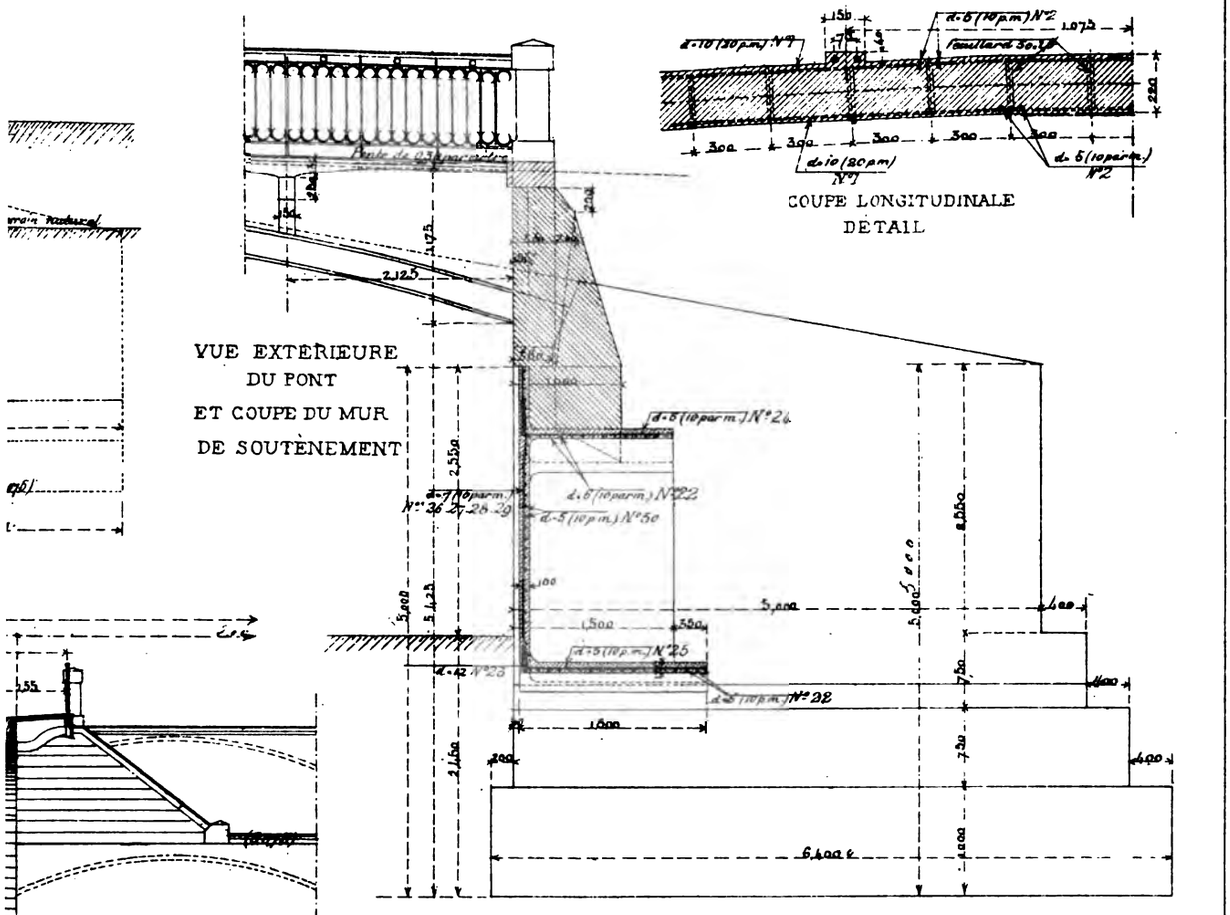
VUE EN PLAN DU MUR EN AILE



# VALETTE – A PERPIGNAN

Ingénieur-Constructeur : Mr BOUSSIRON
Entrepreneur Mr CASEPONCE



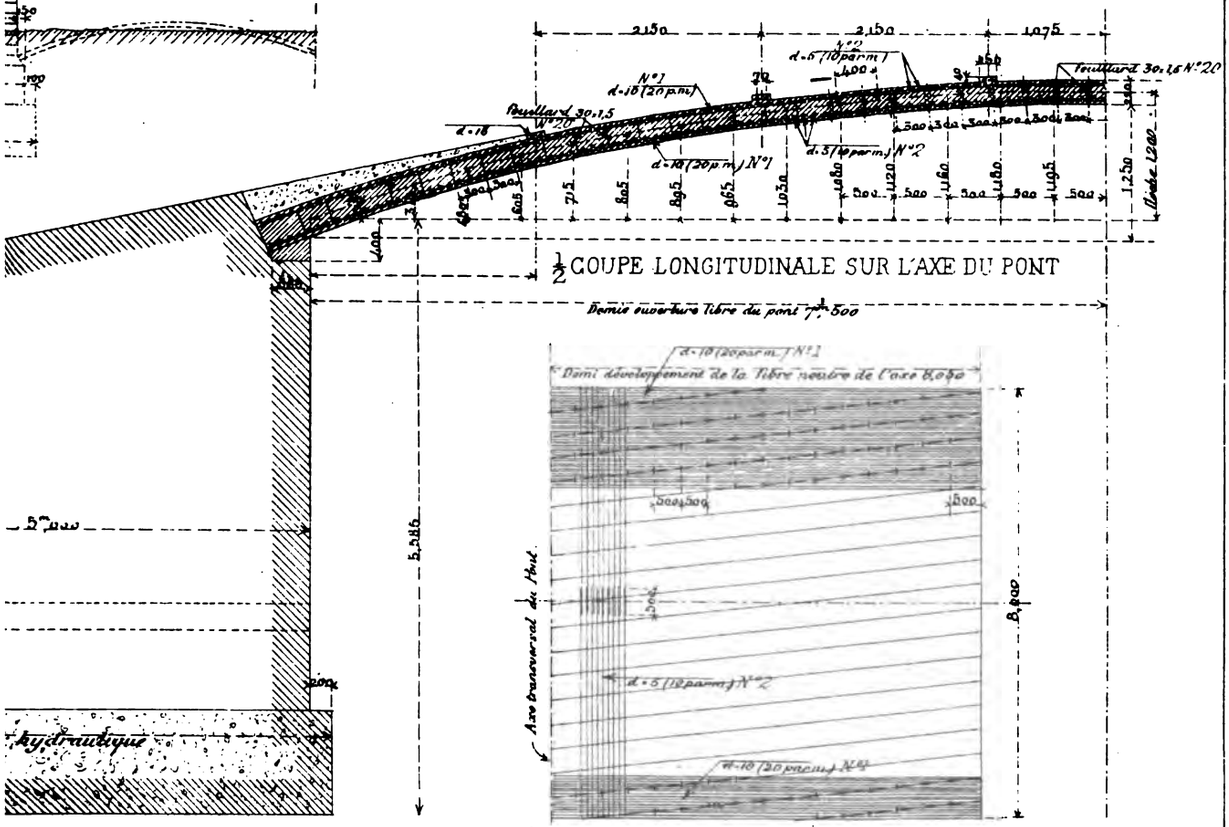
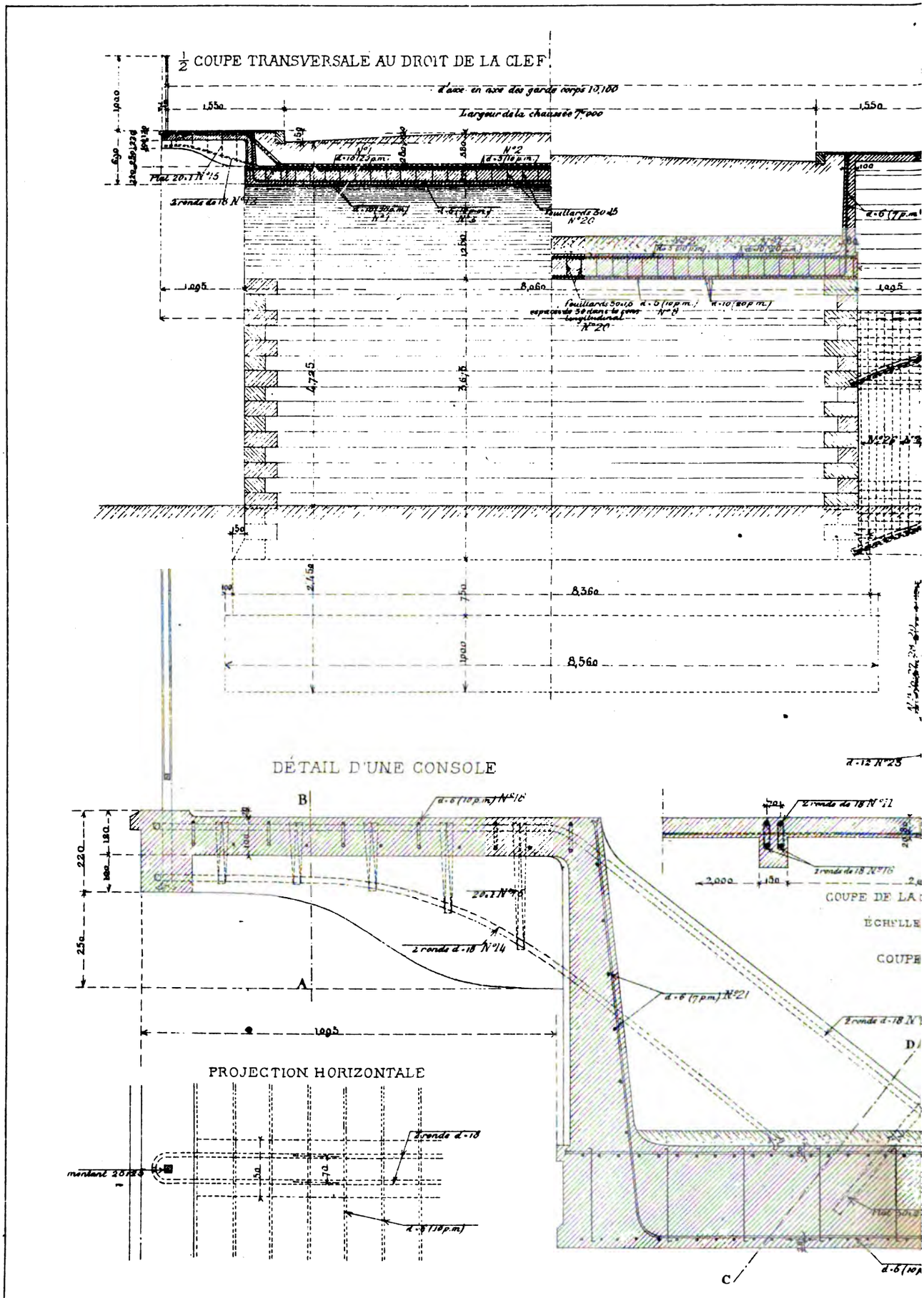







**Planche XXXVI.**

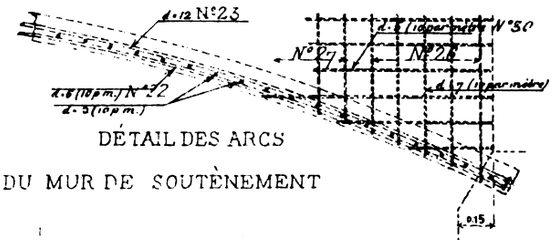
# PONT AU DROIT DE LA RU



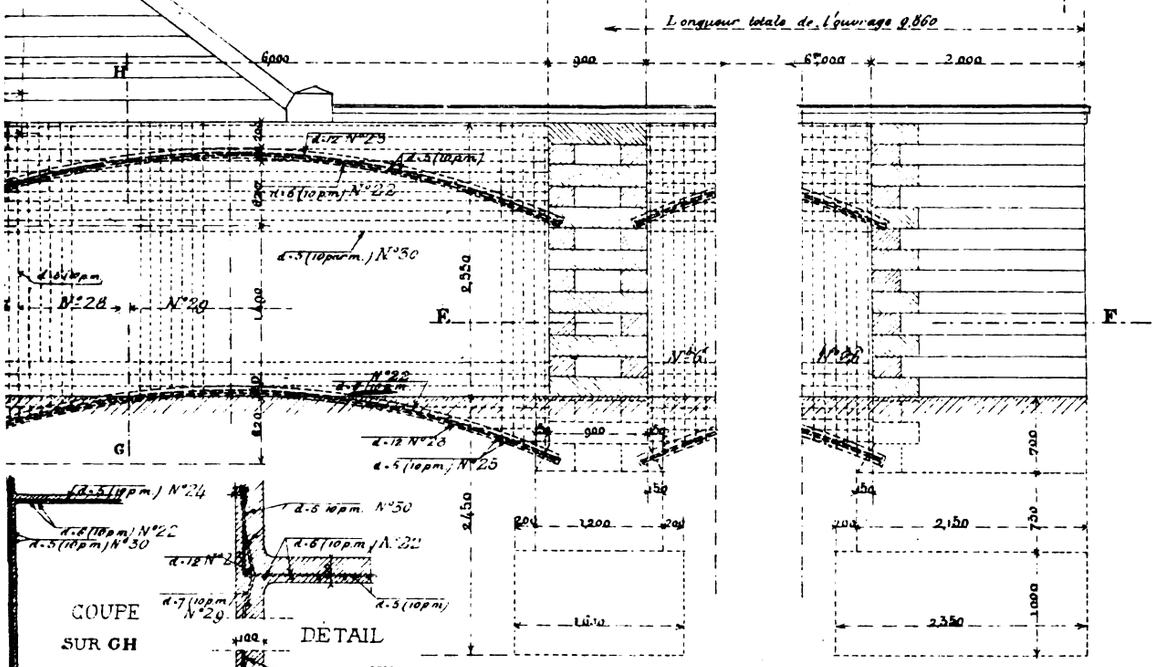
# É VALETTE A PERPIGNAN

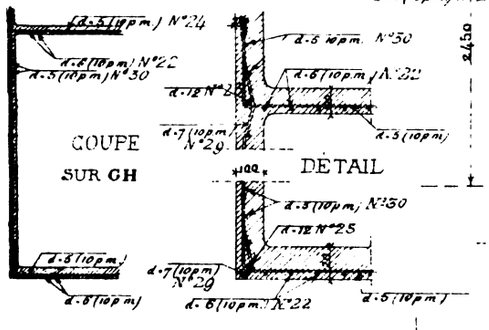
*Ingénieur Constructeur* : Mr BOUSSIRON
*Entrepreneur* : Mr CASEPONCE

COUPES TRANSVERSALES
DU PONT
ET DU MUR DE SOUTÈNEMENT



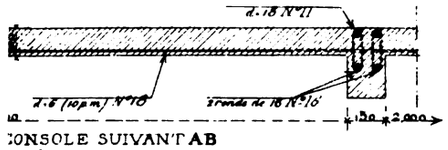

DÉTAIL DES ARCS
DU MUR DE SOUTÈNEMENT



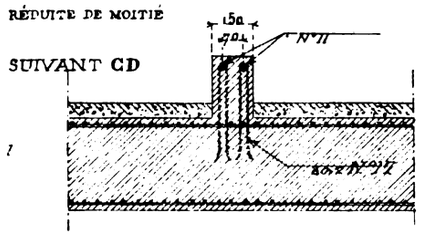

COUPE
SUR GH

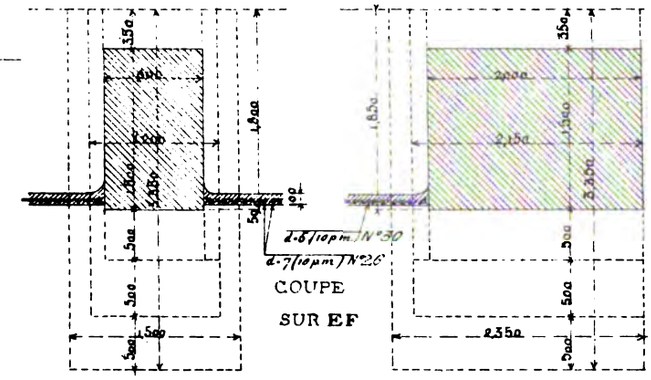
DÉTAIL



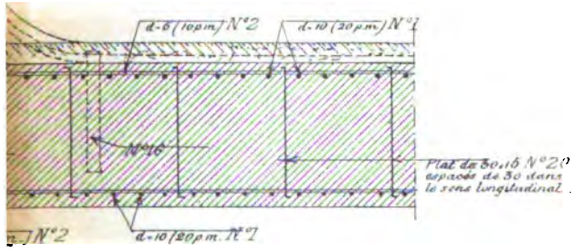

CONSOLE SUIVANT **AB**

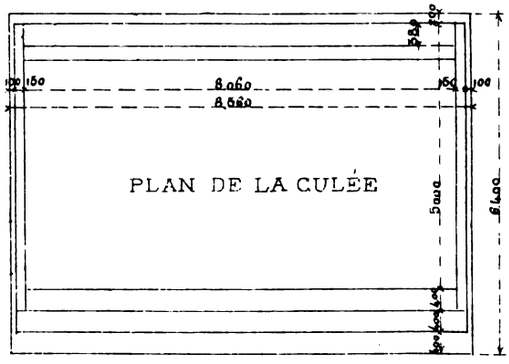
RÉDUITE DE MOITIÉ
SUIVANT **CD**




COUPE
SUR EF

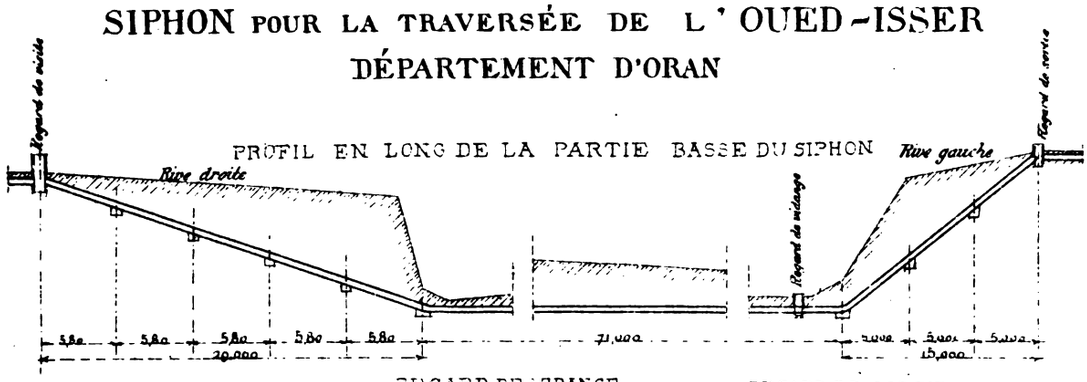



PLAN DE LA CULÉE

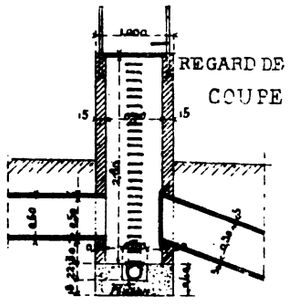
**Planche XXXVII.**

## SIPHON POUR LA TRAVERSÉE DE L'OUED-ISSER
### DÉPARTEMENT D'ORAN

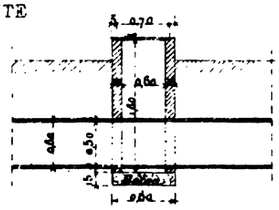



TUYAU DANS LA PARTIE EN PL
PRESSION 12

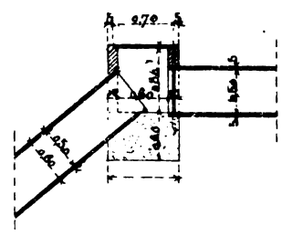
REGARD DE VISITE
COUPE CD

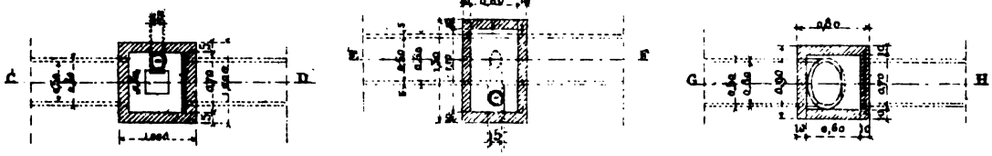


REGARD DE VIDANGE
COUPE EF



REGARD DE SORTIE
COUPE E



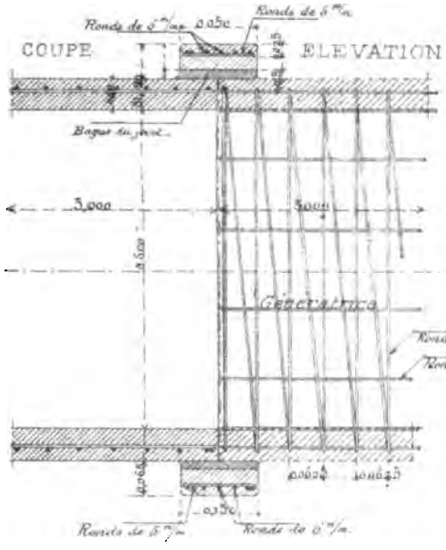



PLAN PLAN PLAN

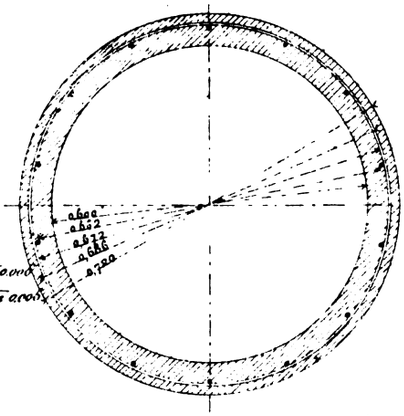
TUYAU DANS LA PARTIE EN SIPHON PRESSION 30M.

## CONDUITE D'ADDUCTION A VALENCE
### 2 atmosphères de pression

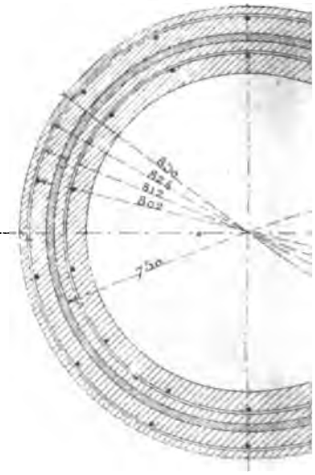
COUPE ELEVATION

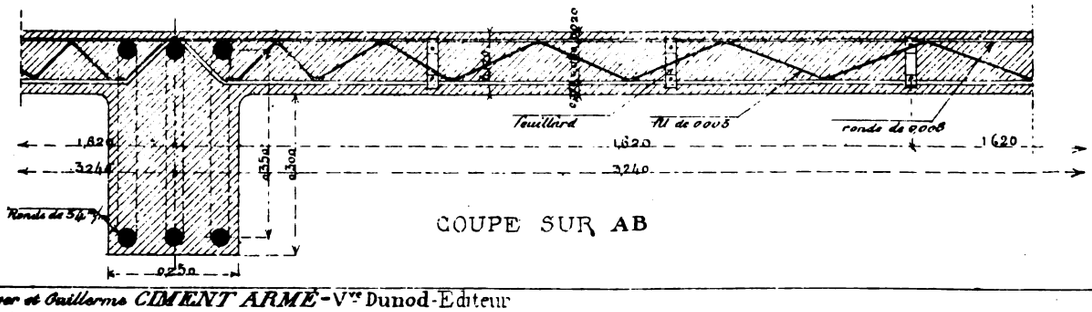



COUPE TRANSVERSALE




COUPE SUR LA B



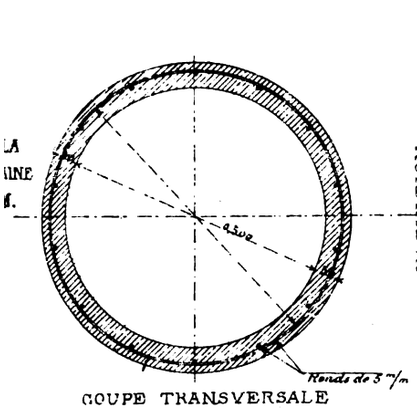




COUPE SUR AB

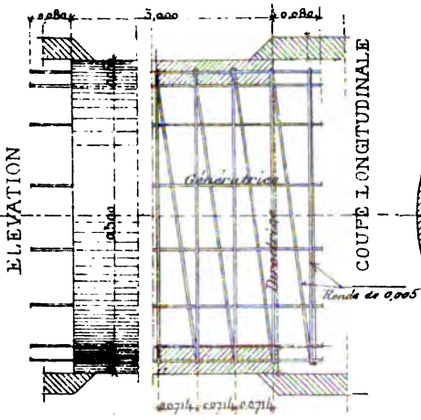
PLAN

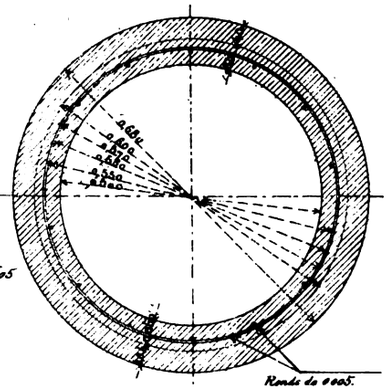
# ION – PLANCHER

*Ingénieurs-Constructeurs:* MM. GIROS ET LOUCHEUR



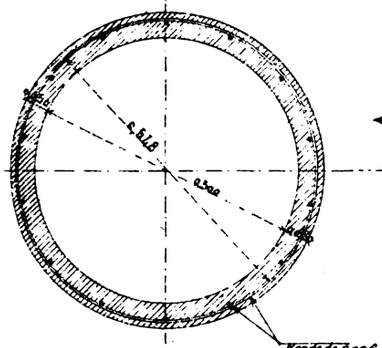

COUPE TRANSVERSALE



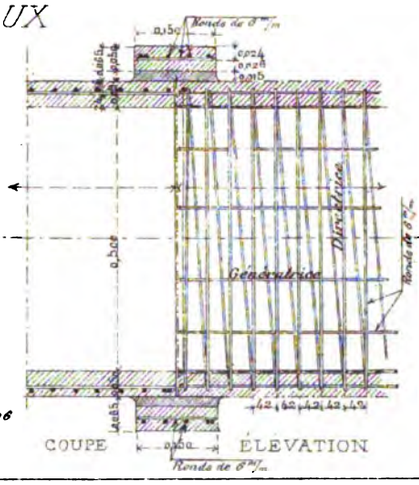



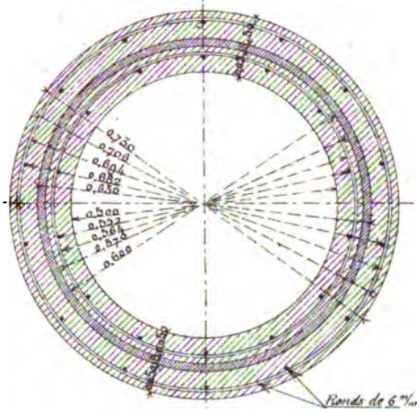

COUPE SUR LE BOURRELET

## *DETAILS DES TUYAUX*




COUPE TRANSVERSALE



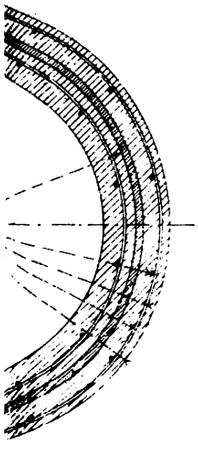

COUPE SUR LA BAGUE

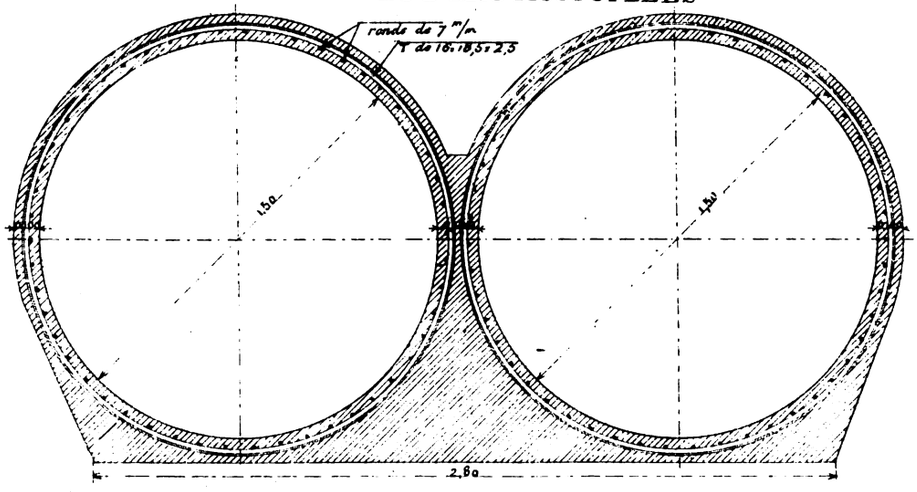
# USINE DU CHEMIN DE FER MÉTROPOLITAIN

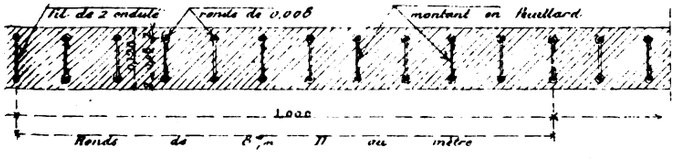
Quai de la Rappée

AGUE

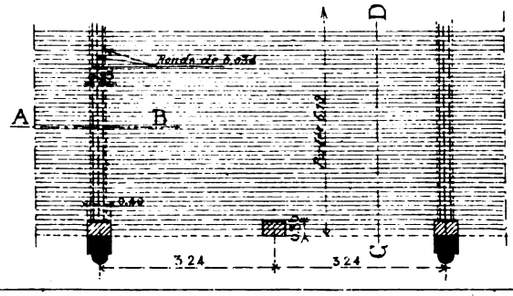
## CONDUITES D'EAU ACCOUPLÉES






COUPE SUR **CD**



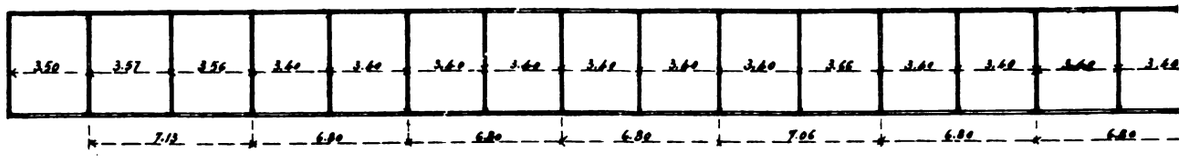

# ICHER

**Planche XXXVIII**

# SOUTES A CHARB

## CHEMIN DE FER MÉTROPOLITAIN DE

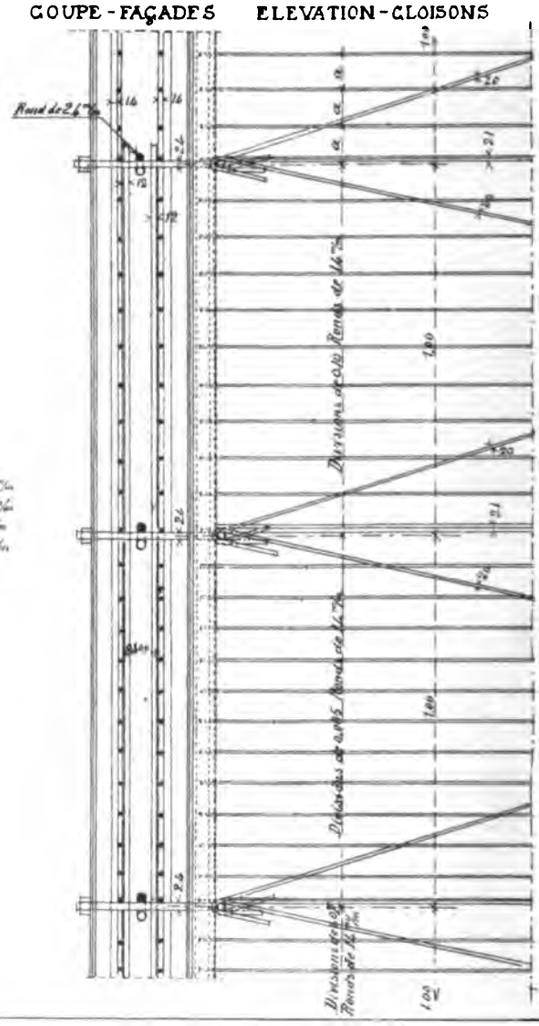
### PLAN D'ENSEMBLE DES




ELEVATION-FAÇADES

de 2m. à 3m. ca. 0.10 Ronds de 12m/m.
de 3m. à 4m. ca. 0.10 Ronds de 10m/m.
de 4m. à 5m. ca. 0.10 Ronds de 8m/m.
de 5m. à 6.45 ca. 0.10 Ronds de 7m/m.

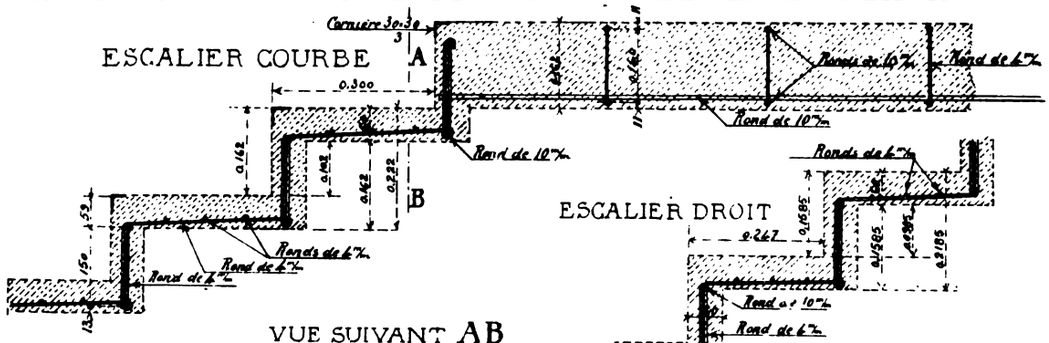
COUPE - FAÇADES ELEVATION - CLOISONS



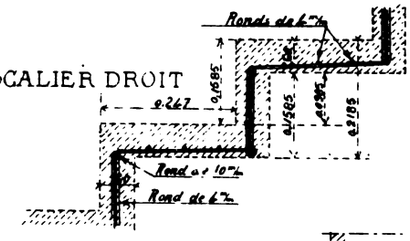

de 3 à 4
de 4 à 5
de 5 à 6,

PLAN

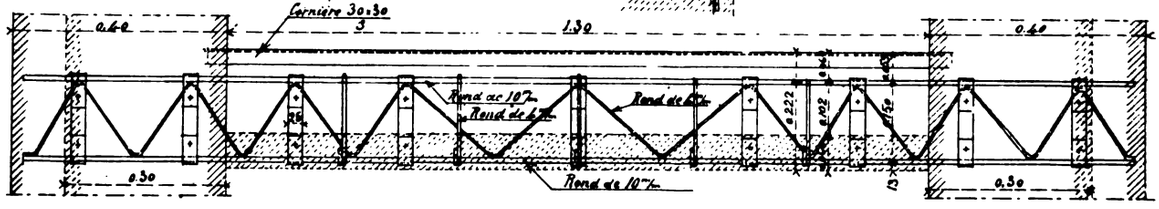
ESCALIER COURBE




ESCALIER DROIT




VUE SUIVANT AB

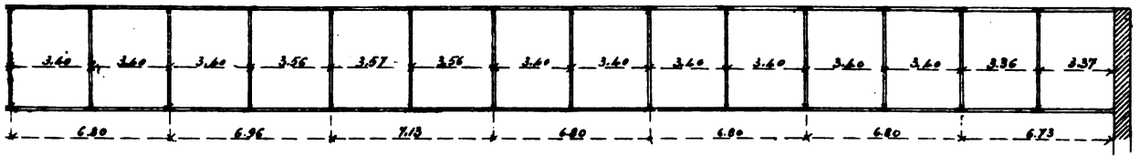


# ON – ESCALIER

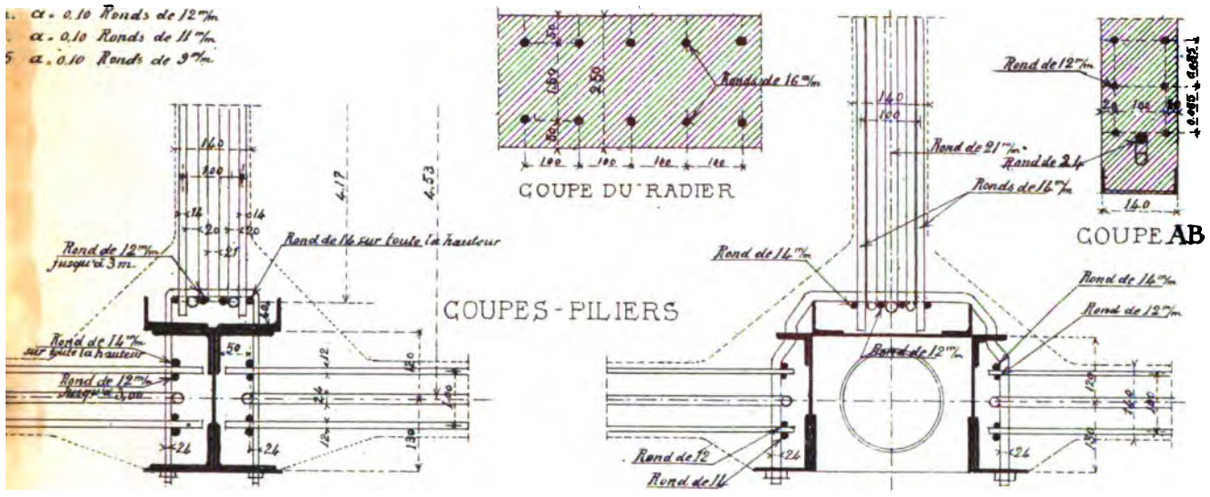
*Ingénieurs-Constrs* Mrs GIROS ET LOUCHEUR

## 'ARIS – USINE GÉNÉRALE DE BERCY

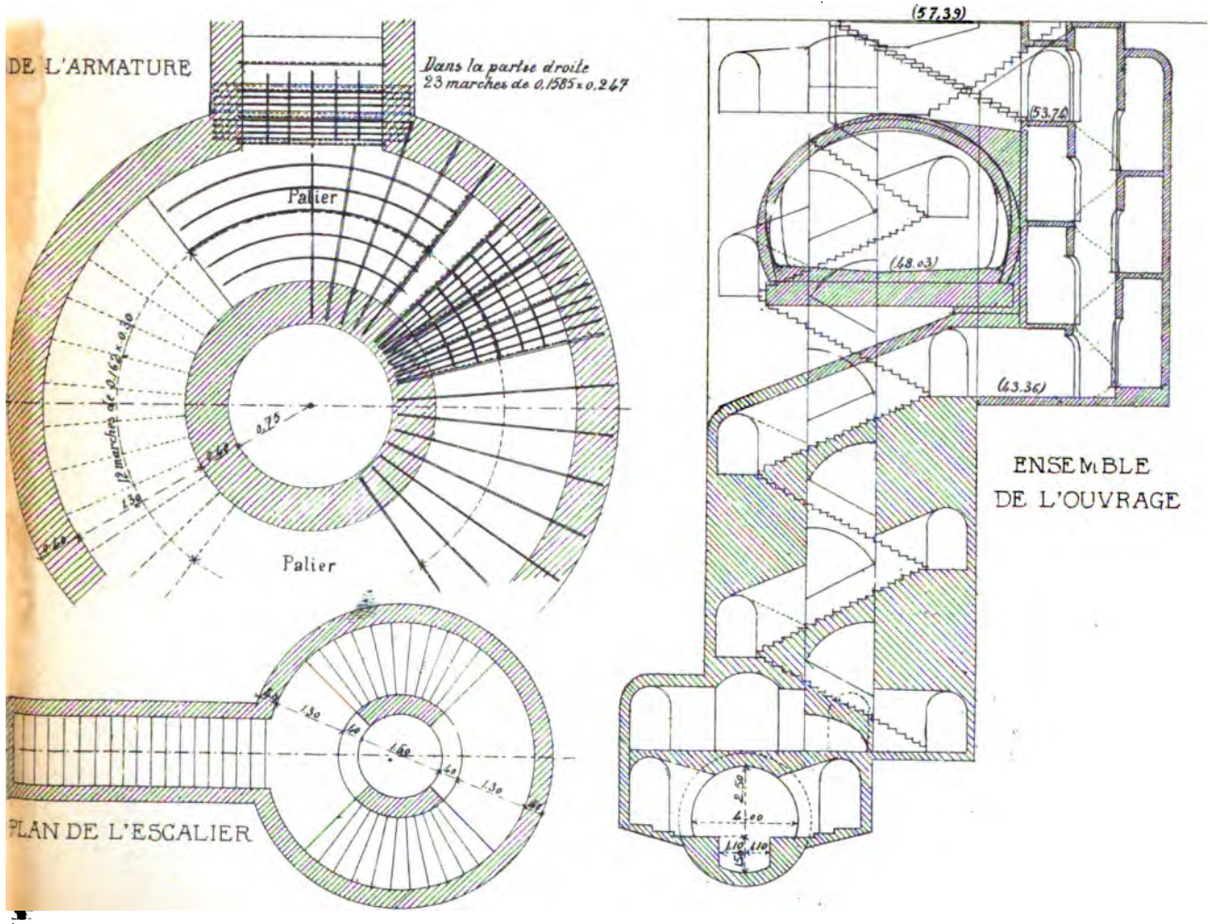
OUTES A CHARBON

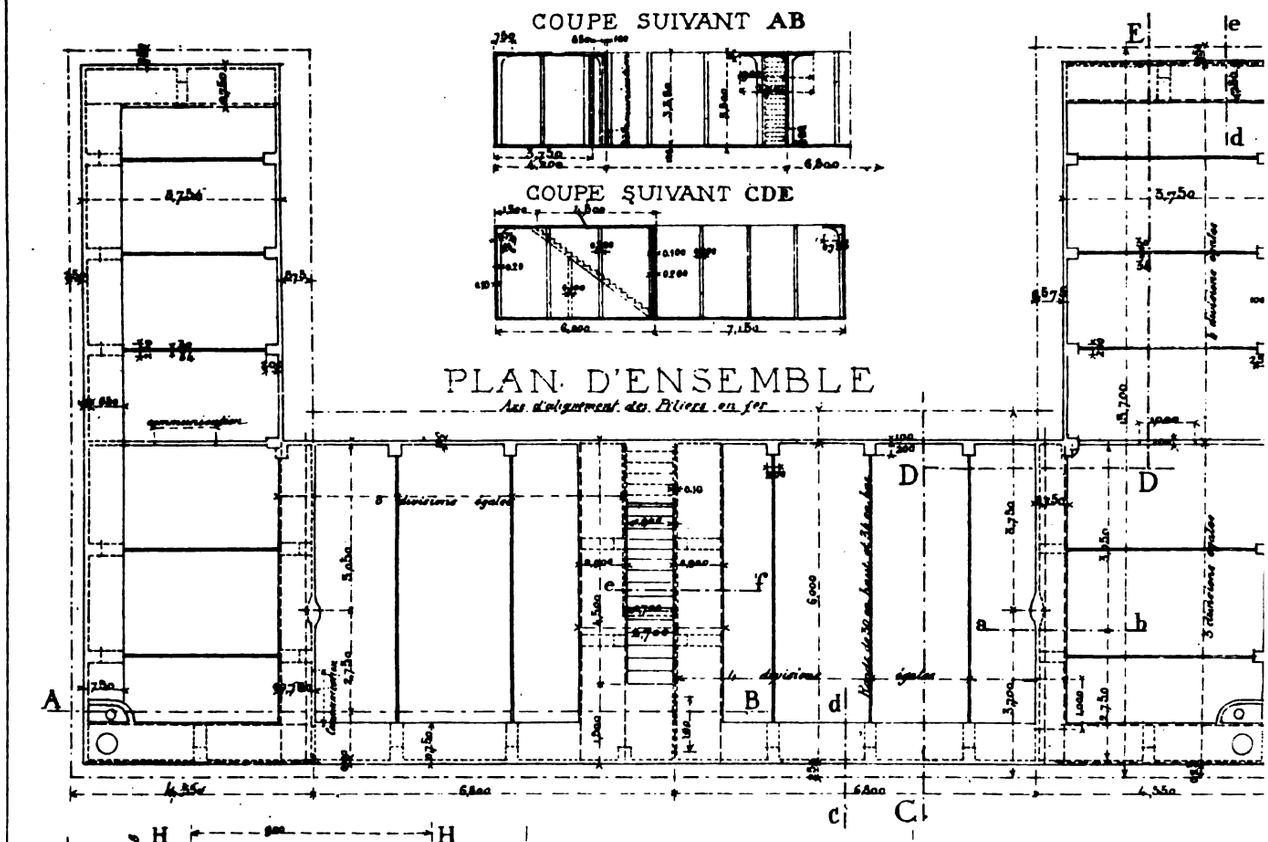


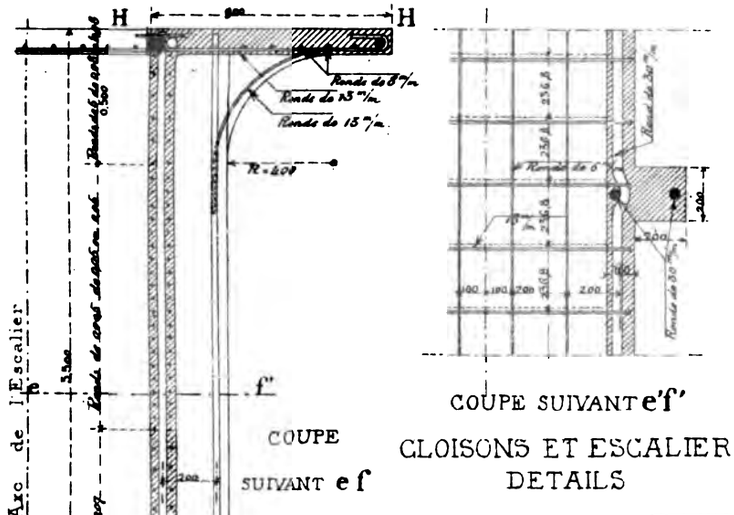

DE TAILS

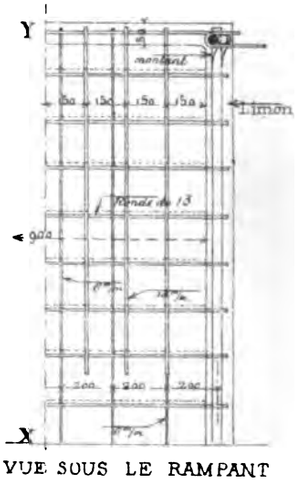


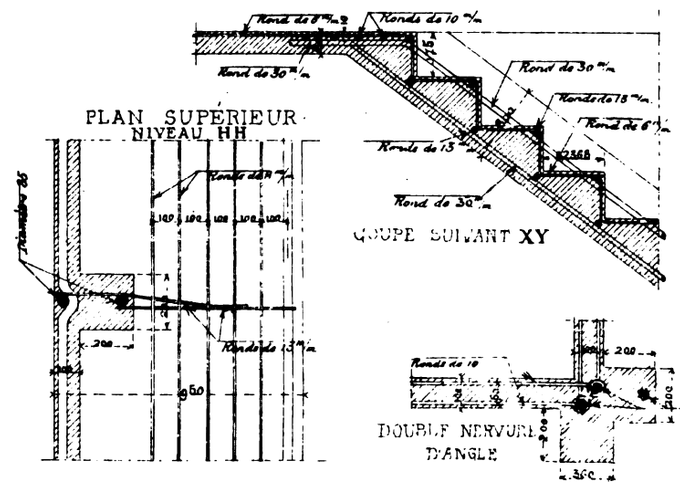

## ESCALIER D'ACCÈS AU COLLECTEUR MARCEAU-PLACE DE L'ÉTOILE




COUPE SUIVANT AB
COUPE SUIVANT CDE
PLAN D'ENSEMBLE
Axe d'alignement des Piliers en fer
A
B
C
D
E
F
a
b
c
d
e
f

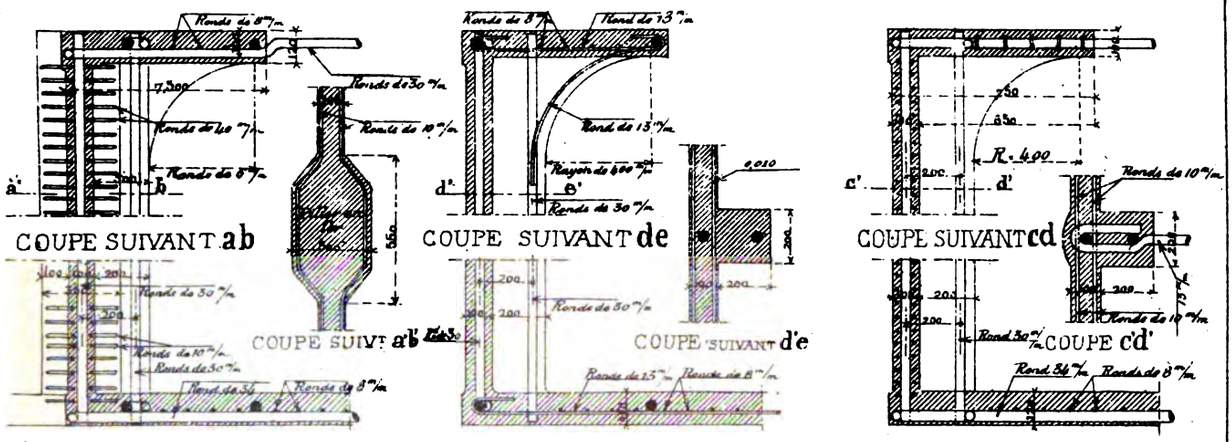

H
H
Axe de l'Escalier
e
f
COUPE SUIVANT ef
COUPE SUIVANT e'f'
CLOISONS ET ESCALIER
DETAILS


Y
X
montant
limon
VUE SOUS LE RAMPANT

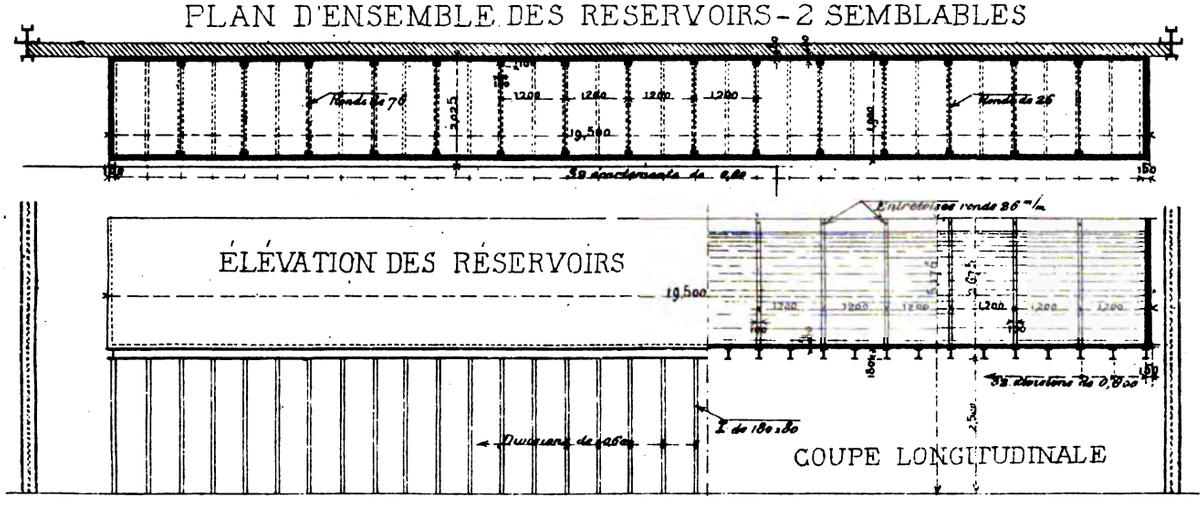

PLAN SUPÉRIEUR
NIVEAU HH
COUPE SUIVANT XY
DOUBLE NERVURE D'ANGLE

# ECTRIQUE D'ASNIERES

*Ingénieurs Constructeurs : MM.rs GIROS ET LOUCHEUR*




PLAN D'ENSEMBLE DES RÉSERVOIRS - 2 SEMBLABLES



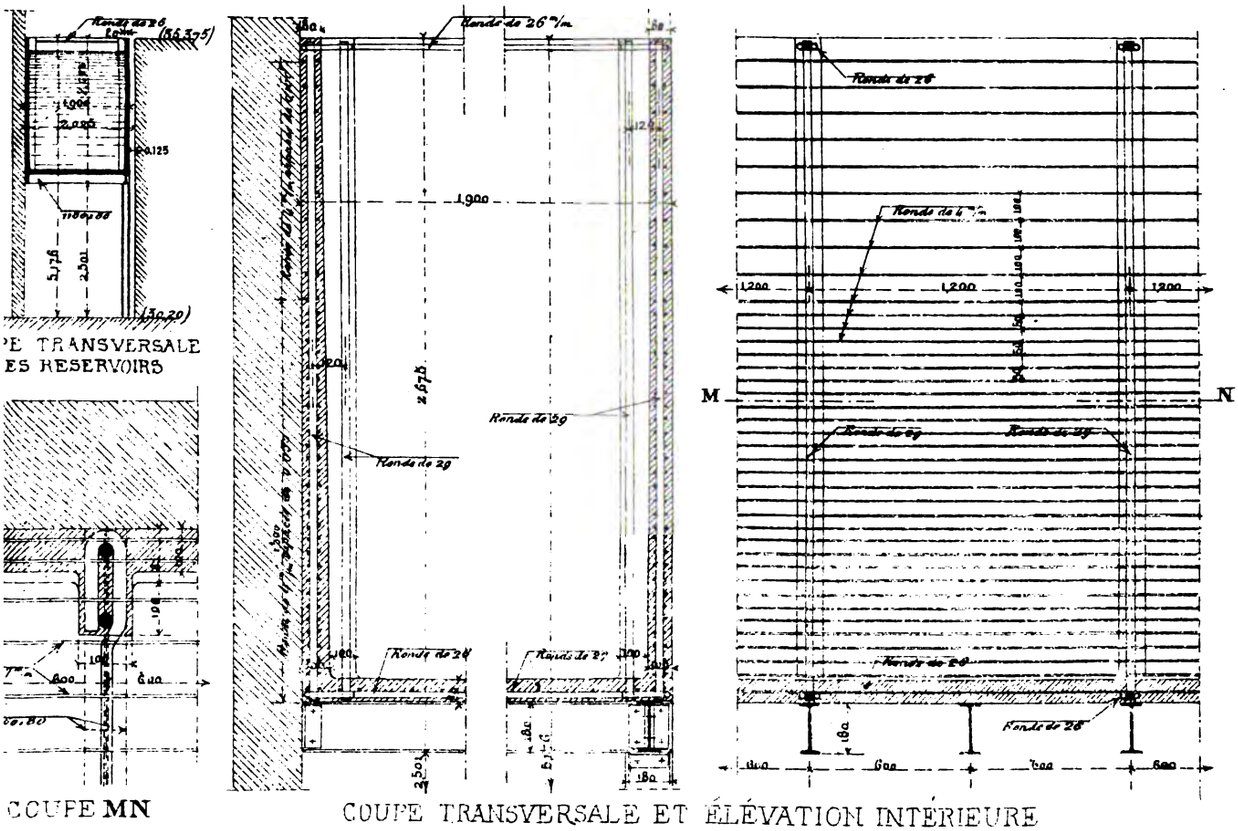
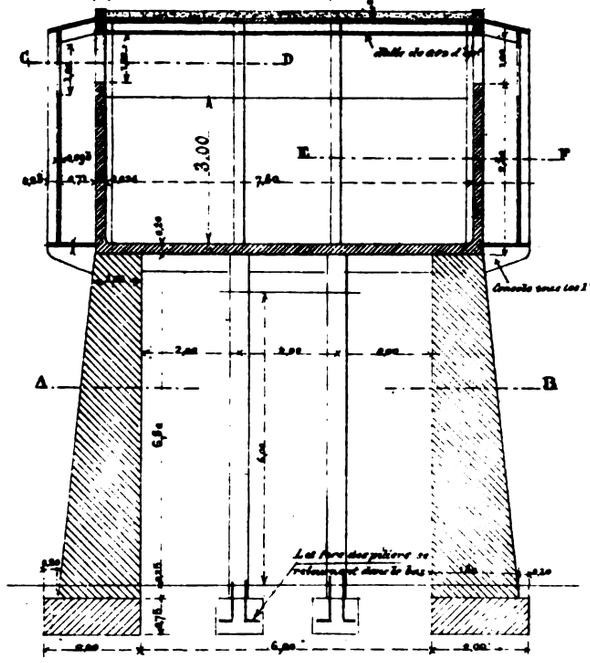




**Planche XLI**

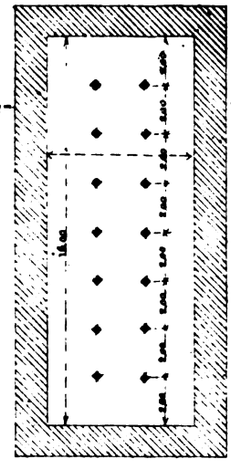
# RÉSERVOIR DE 400 M³ SUR MURS EN MÂÇONNERIE

COUPE TRANSVERSALE SUIVANT MN

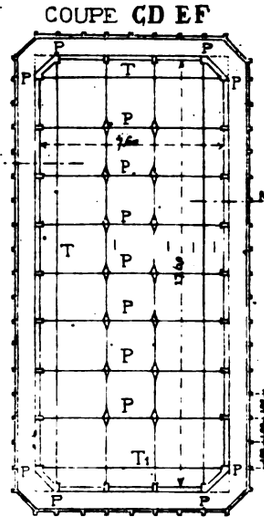



Les 8 poutres p situées aux angles ont la même section que la partie verticale des poutres P (Voir coupe ed) Ces poutres p sont reunies en bas et au sommet par des tirants T
Les tirants T du bas sont chacun en rond de 25
Les tirants T du haut sont chacun en rond de 15
Les tirants T, du bas sont chacun en rond de 25
Les tirants T, du haut sont des poutres à section ef

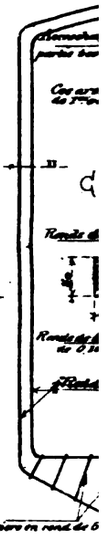
COUPE AB



COUPE CD EF



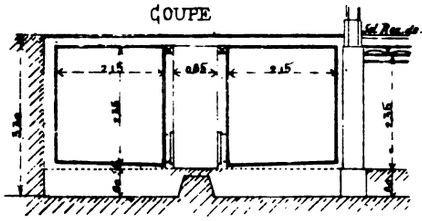

ARMAT
DE LA G



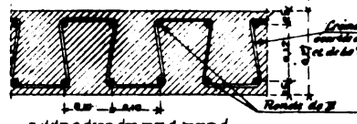
# CUVES A VIN

## PROPRIÉTÉ DE Mr FONTAN

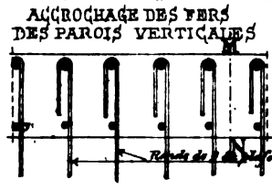
COUPE



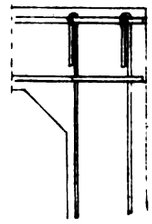
COUPE HORIZle D'UNE PAROI VERTICALE



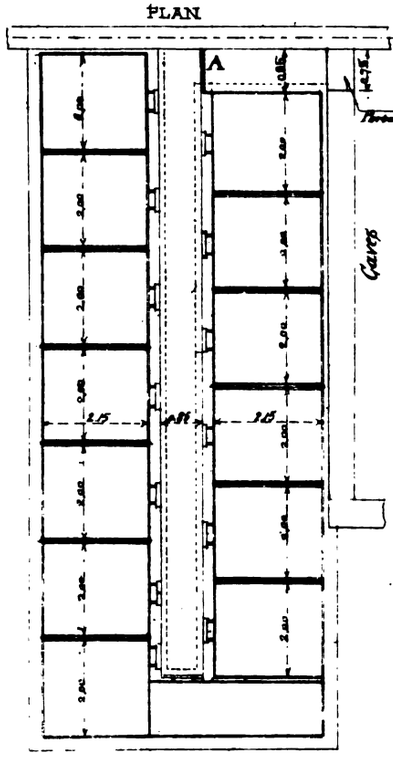
ACCROCHAGE DES FERS DES PAROIS VERTICALES



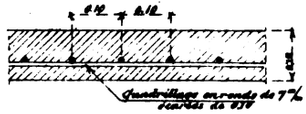
COUPE MN



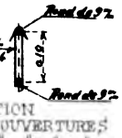
PLAN



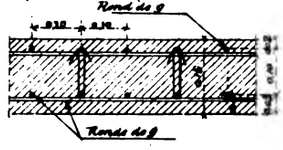

RADIER



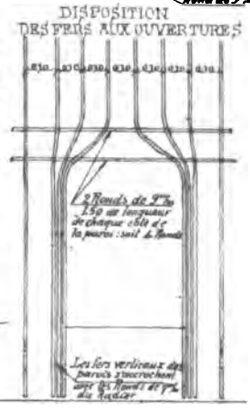
POUTRE A



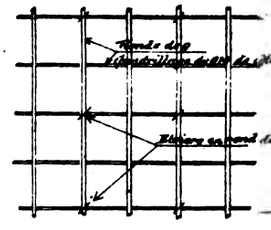
COUPE VERTICALE DU PLAFOND



DISPOSITION DES FERS AUX OUVERTURES



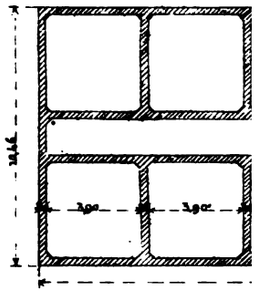
PLAN DU PLAFOND



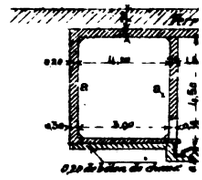
# CITERNES

## PROPRIÉTÉ DE

FRAGMENT



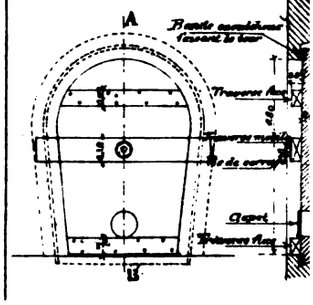
COUPE TRA



DALLE DU

PORTE DE NETTOYAGE

COUPE



# VOIRS

Système MONIER
*Ingénieur Constructeur : Société des travaux en ciment de la Plaine Saint Denis*

TURE
ALERIE

ELEVATION DES MEMBRURES D'UNE POUTRE P

COUPE ab

COUPE cd

COUPE ef

DÉTAIL DE LA PAROI

COUPE mn

DALLE DE FOND

DALLE DE COUVERTURE

COUPE HORIZ^LE DE LA GALERIE DE POURTOUR

PILIER SOUTENANT LE FOND

PAROI VERTICALE DU RÉSERVOIR

PILIER SOUTENANT LE PLAFOND

S A VIN
M^r FÉLIX POTIN

T DE PLAN

ANSVERSALE

FOND

AB

DALLE DE COUVERTURE

PAROIS VERTICALES a-a

# RÉSERVOIR
## POUR LA VILLE DE VIMOUTIERS (ORNE)

COUPE SUR LA PAROI

COUPE SUR UNE POUTRE

COUPE AB

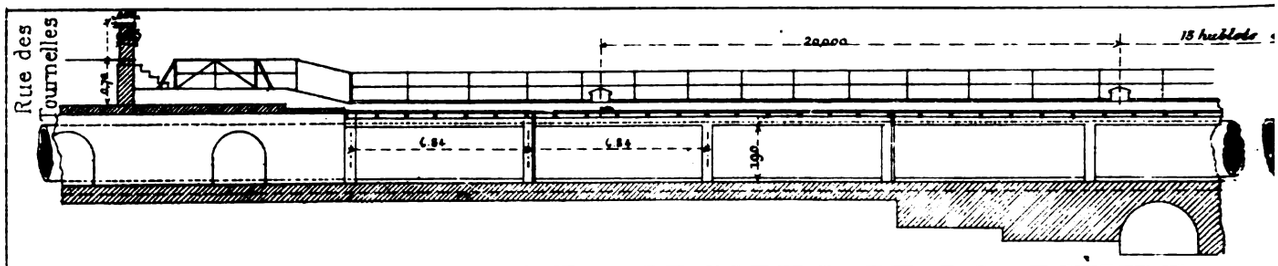
PLAN

POUTRE a

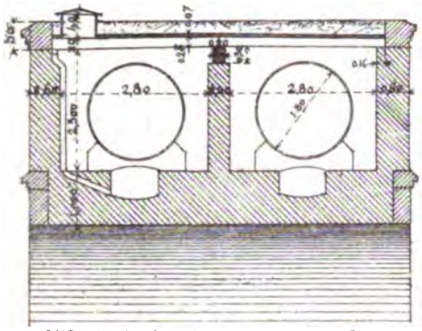
PLANS DE LA PAROI ET DU PILIER

Planche XLII

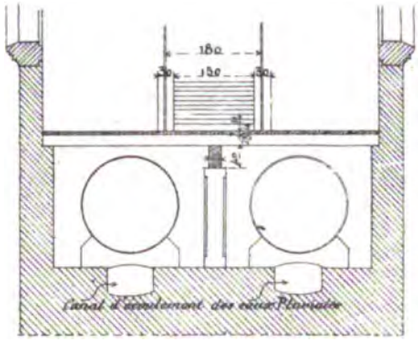
# PLANCHERS - MUR DE S



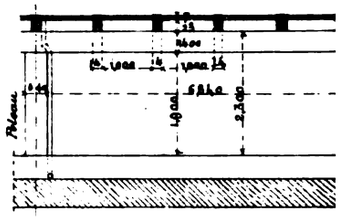

## COUVERTURE DES ARCADES DE LA BIÈVRE



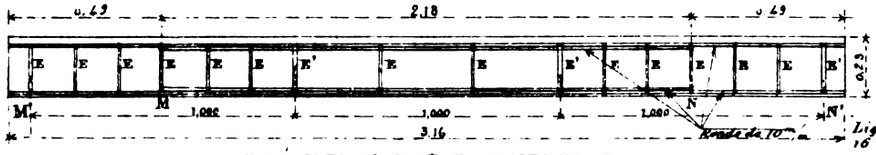

COUPE TRANSVERSALE SUR UNE ARCHE



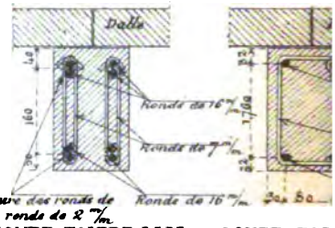

COUPE SUIVANT **AB**



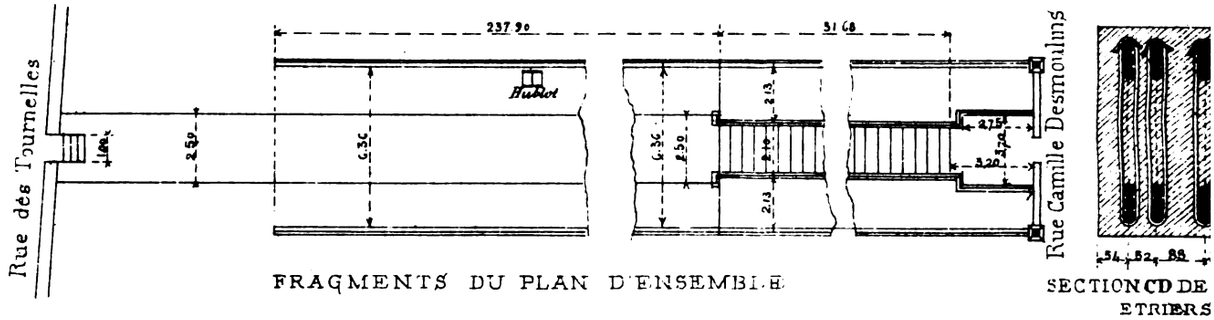

COUPE LONGITUDINA




ELÉVATION D'UNE POUTRELLE
RÉPARTITION DES ETRIERS

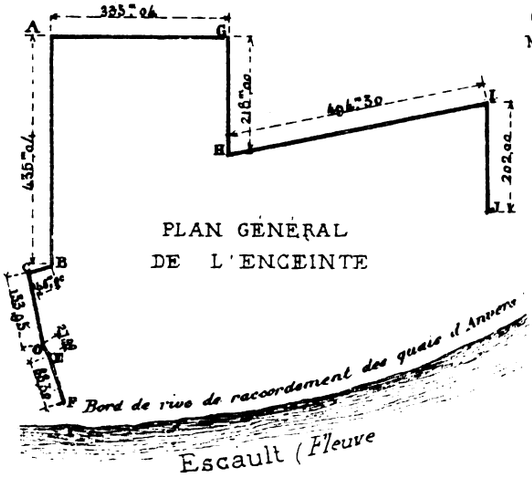



COUPE ENTRE **MN** COUPE EN
ETRIERS **E** ETRIER
POUTRELLES

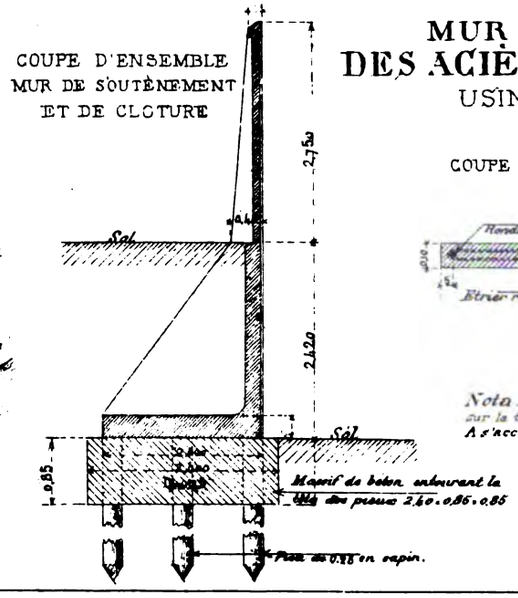



FRAGMENTS DU PLAN D'ENSEMBLE

SECTION **CD** DE
ETRIERS



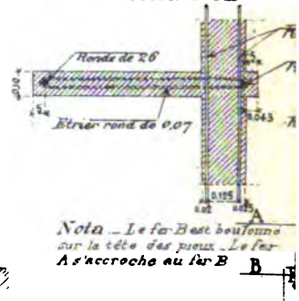

PLAN GÉNÉRAL
DE L'ENCEINTE




COUPE D'ENSEMBLE
MUR DE SOUTÈNEMENT
ET DE CLOTURE

## MUR D'ENCEIN
## DES ACIÉRIES D'AN
USINE D HOBOKE

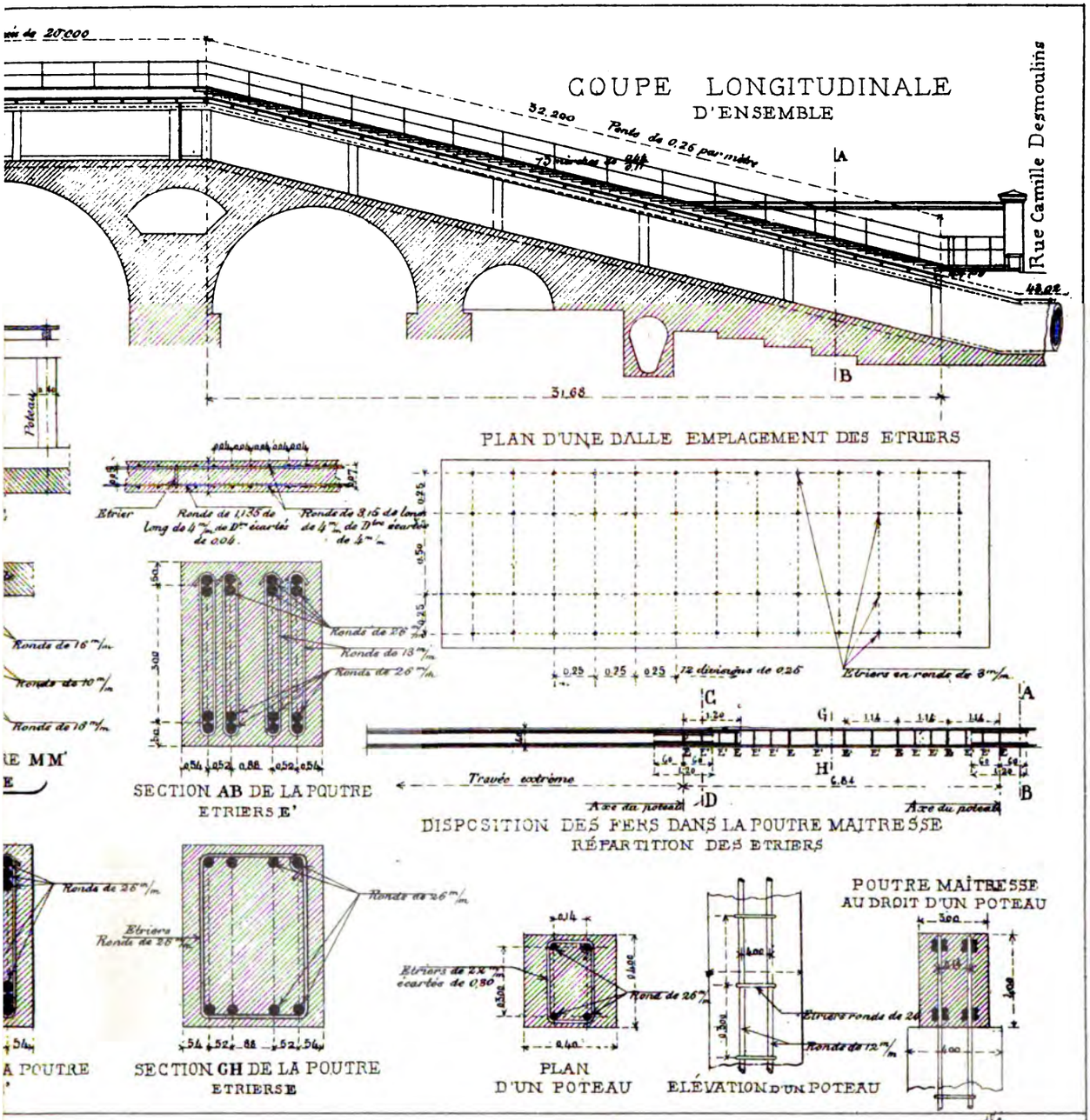
COUPE SUIVANT **cd**




ARMAT

# DUT È NEMENT-CLÔTURE

Système MONIER
Ingén.-Const.: Société des trav.x en ciment de la Plaine Saint Denis.



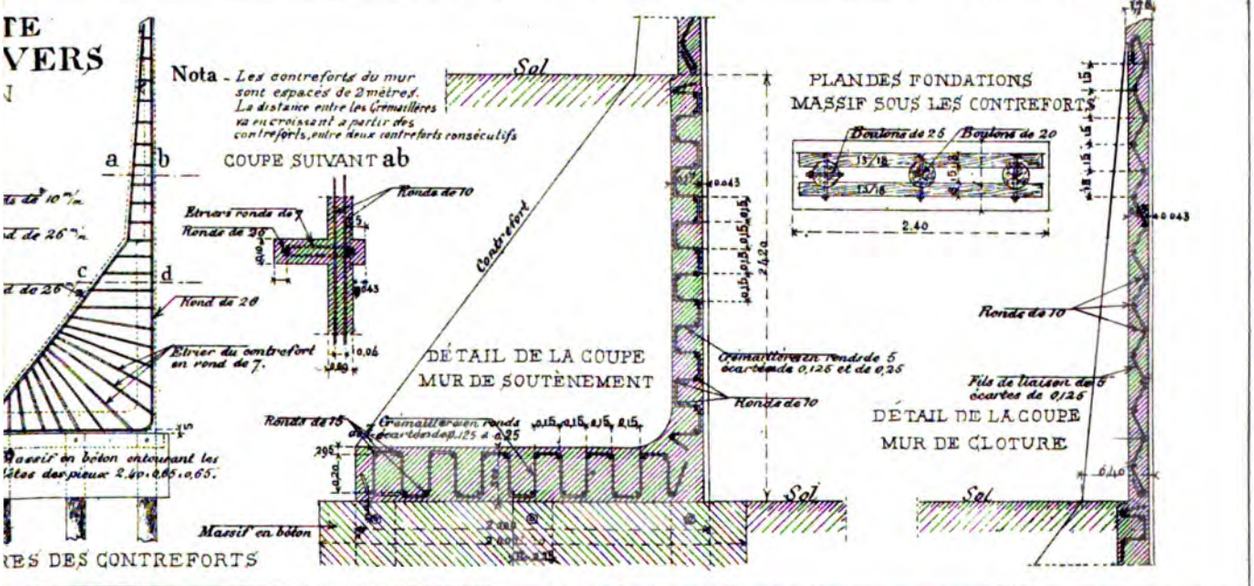
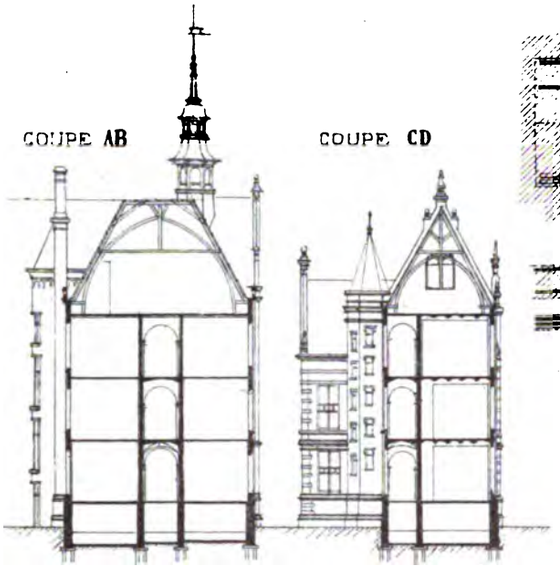
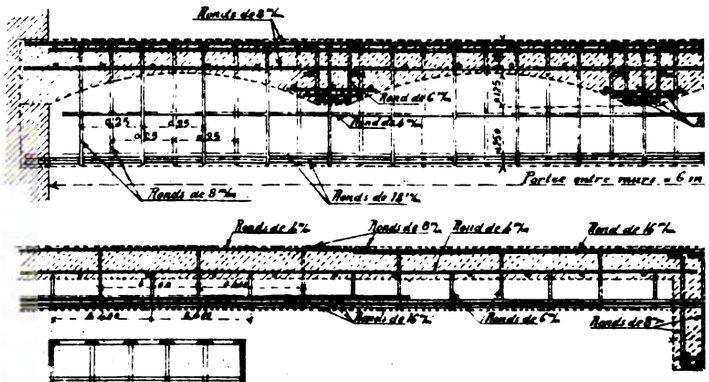
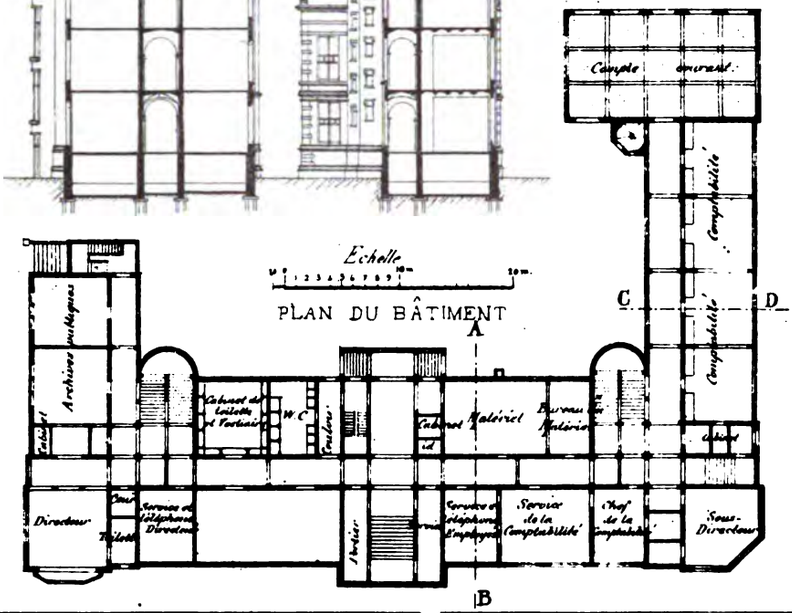




**Planche XLIII**

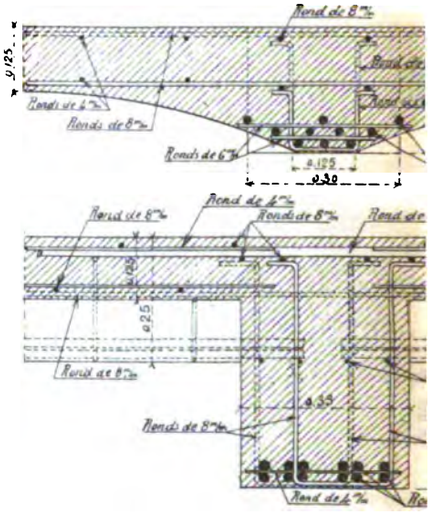
## CAISSE D'ÉPARGN



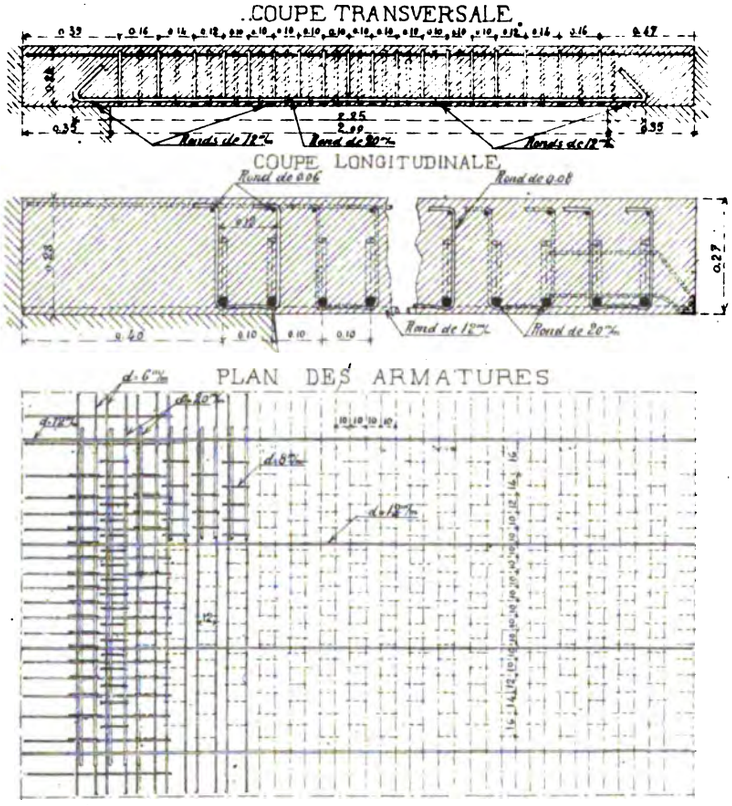




DETAILS PLANCHERS ET

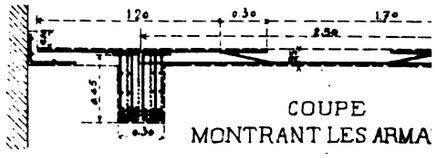



## DALLES DU QUAI DE ROTTERDAM

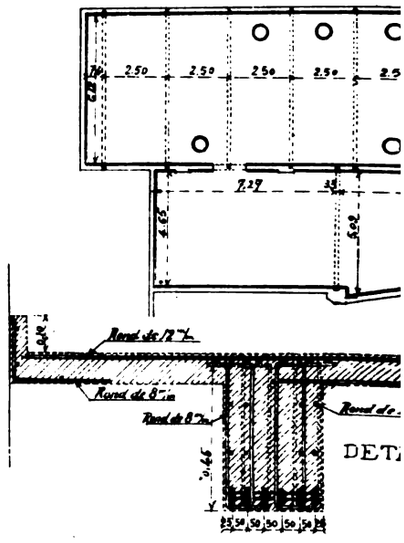



## FABRIQUE DE MARGARINE

### PLANCHERS ET P



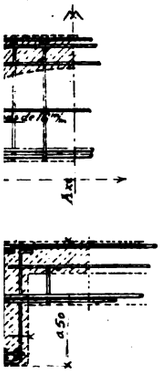

PLAN DE LA F



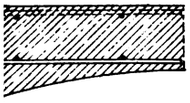
T POUTRES

*Constructeur :* Société WITTENBURG

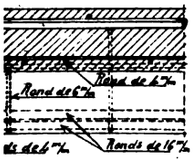
E D'AMSTERDAM



UTRES



nds de 16%

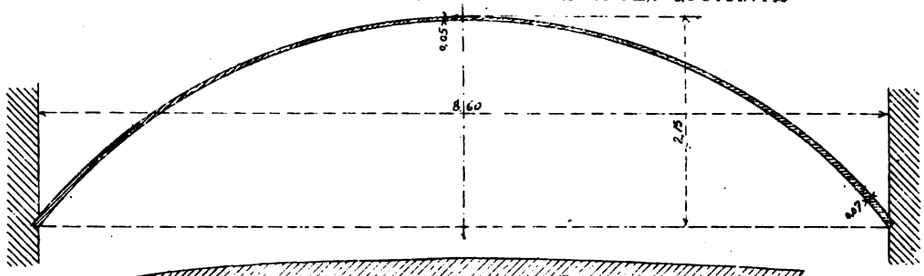



ds de 6%

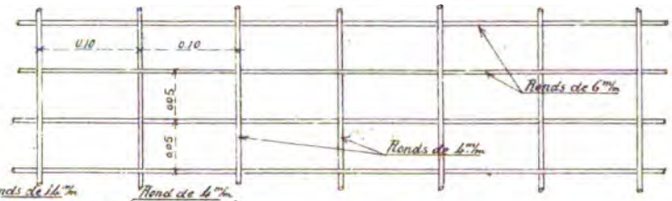
ds de 8%

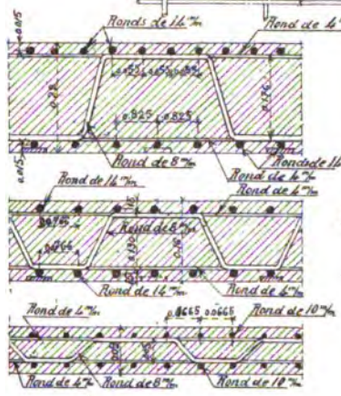
de 10%

VOÛTE AU-DESSUS DE LA SALLE DES COMPTES-COURANTS



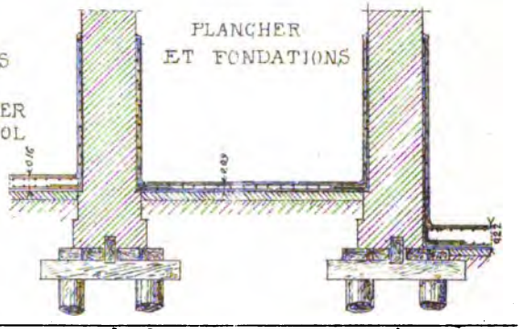
ARMATURE DE LA VOÛTE



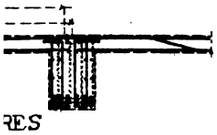

DETAILS DU PLANCHER EN SOUS-SOL

PLANCHER ET FONDATIONS



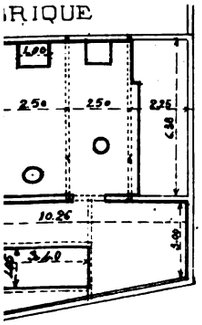
A OSCH

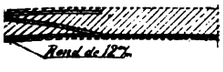
UTRES



RES

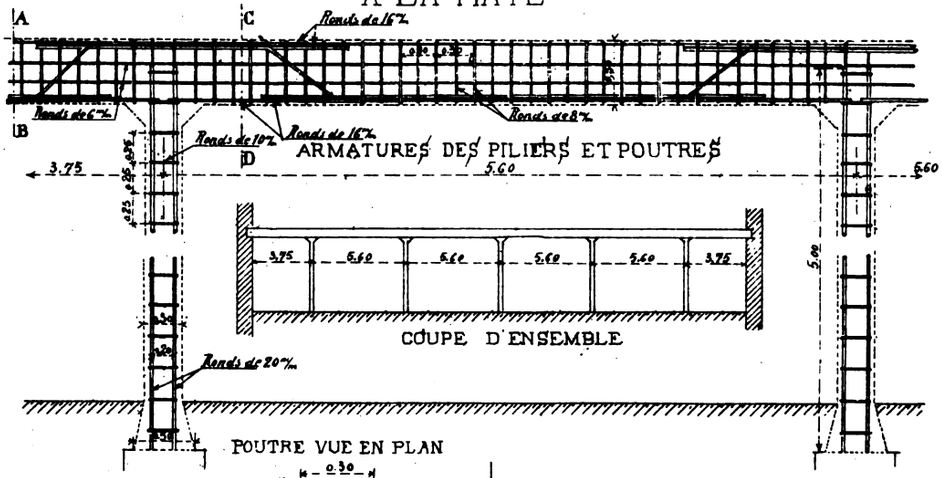
IRIQUE

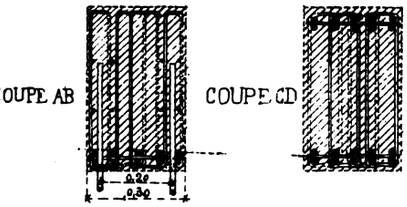



D'UNE POUTRE

ATELIERS DE RÉPARATIONS DES TÉLÉGRAPHES DE L'ÉTAT A LA HAYE




POUTRE SUPPORTANT UN MUR DE FAÇADE DANS UNE CUISINE POPULAIRE

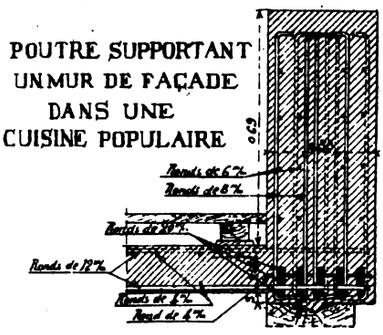
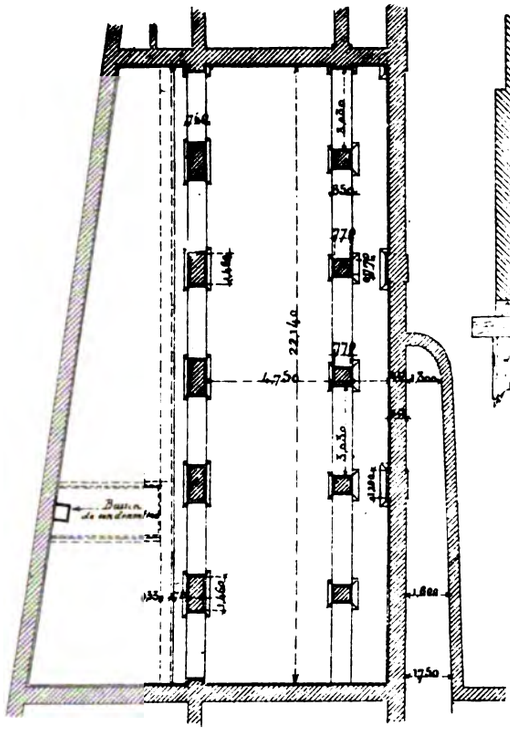
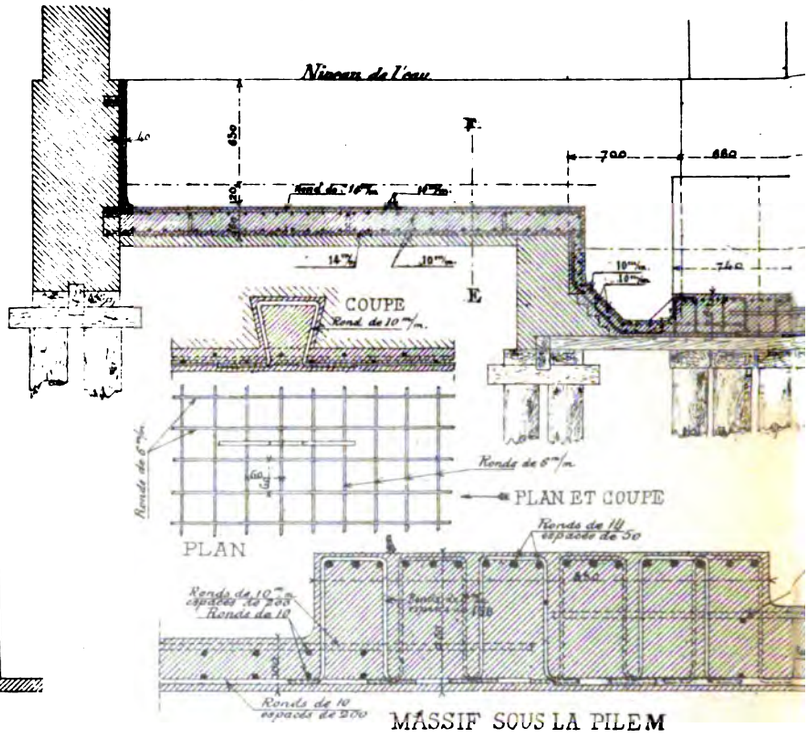



**Planche XLIV.**

## CAVE ÉTANCHE DE LA BOR

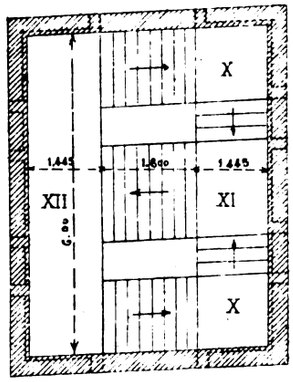



PLAN DES CAVES

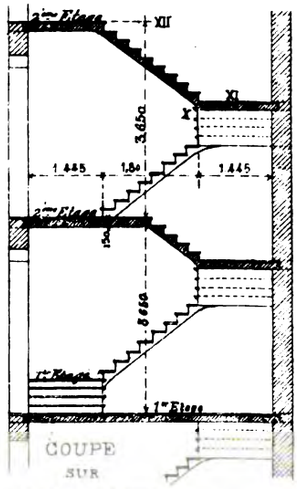



MASSIF SOUS LA PILEM
DETAIL DE L'ARMATURE

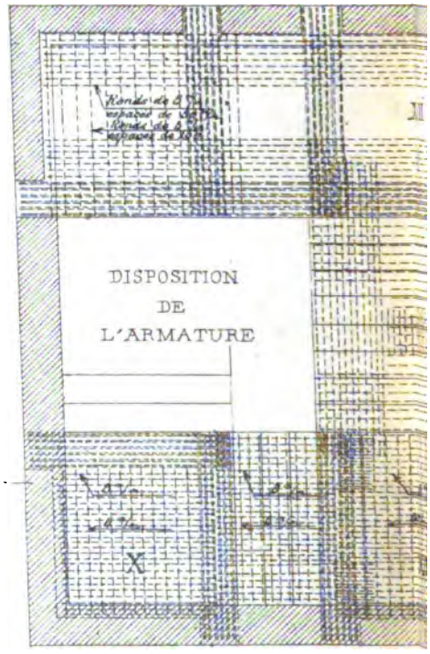
## HÔTEL MERCURIUS-A

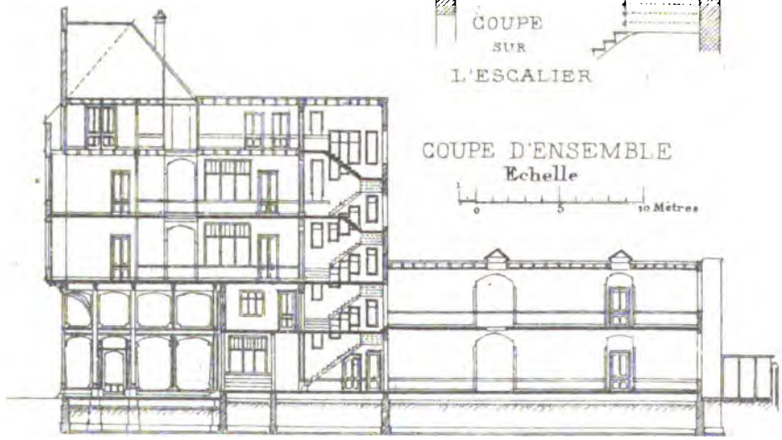


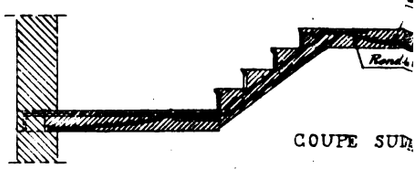

PLAN DE L'ESCALIER




COUPE SUR L'ESCALIER



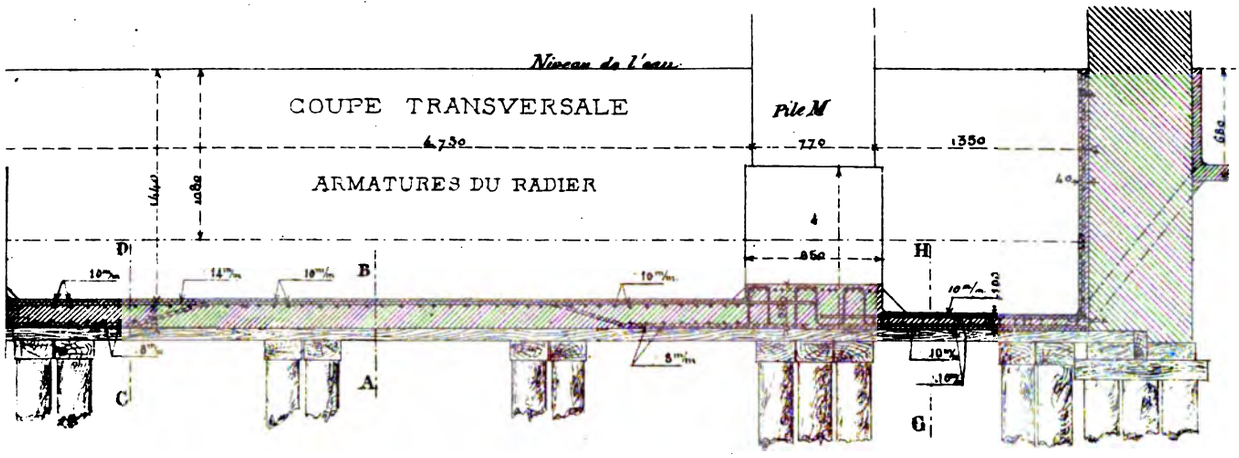



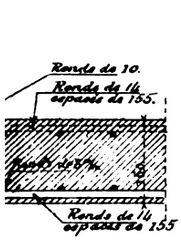
COUPE SUR

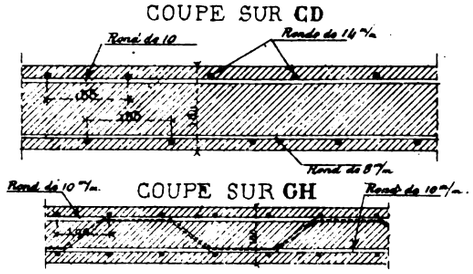
# ATION-ESCALIER

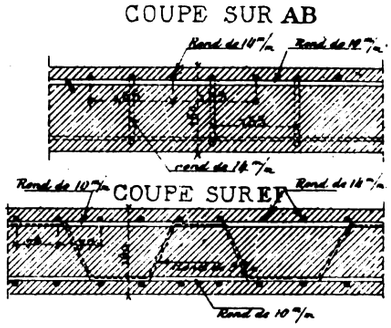
Constructeur: SOCIÉTÉ WITTENBURG

## URSE D'AMSTERDAM

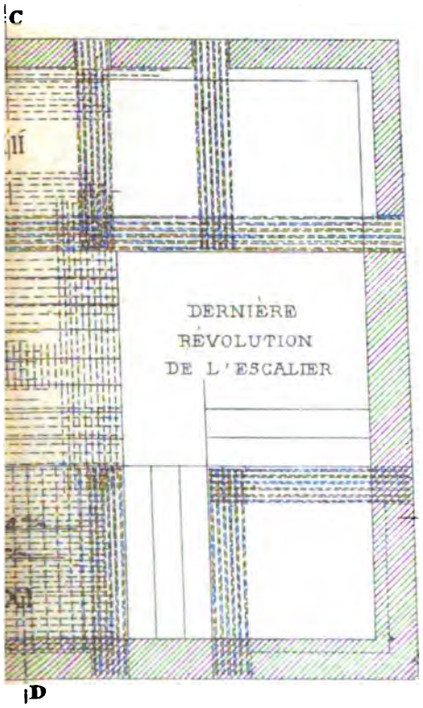


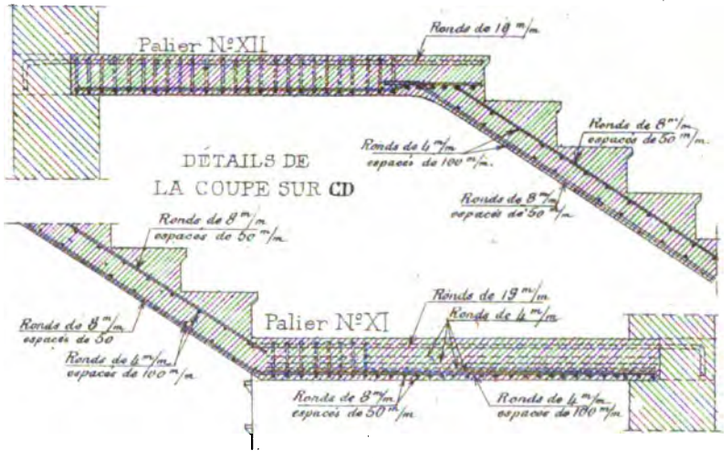



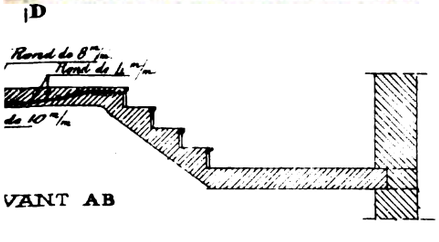




## EL
## A LA HAYE



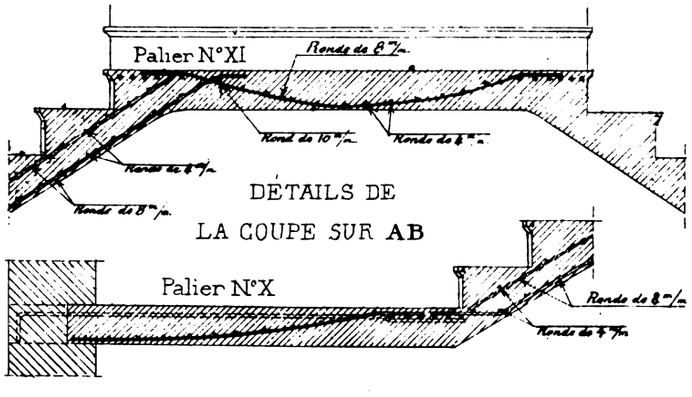
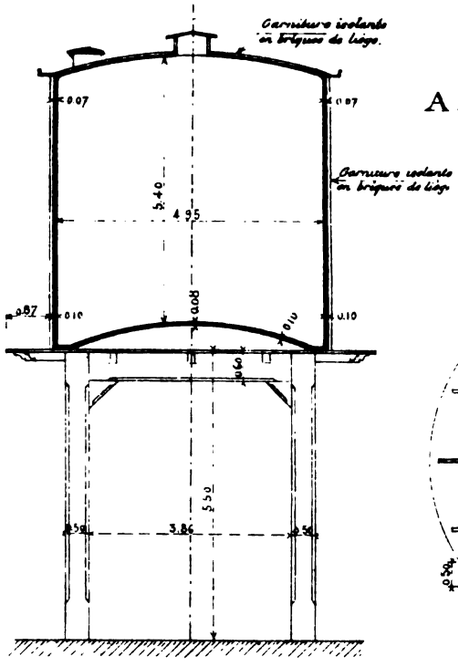
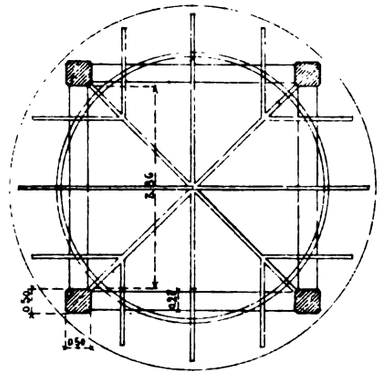




**Planche XLV.**

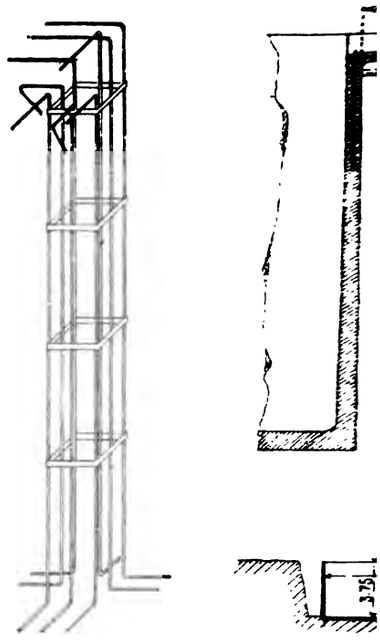
## RÉSERVOIR
## A ARCIS - EN - BRIE
### CAPACITÉ 100 M³.




ELEVATION ET COUPE

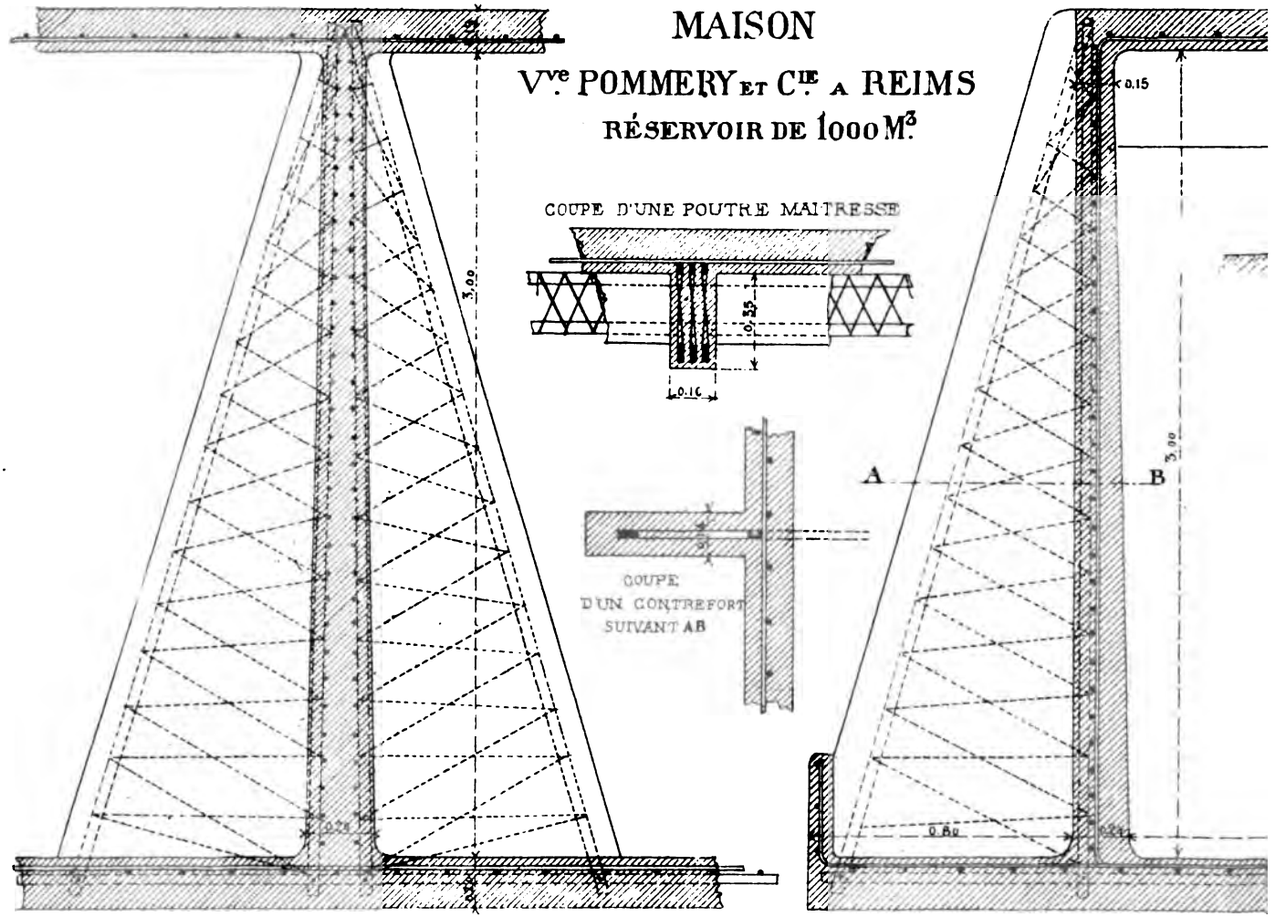



PLAN

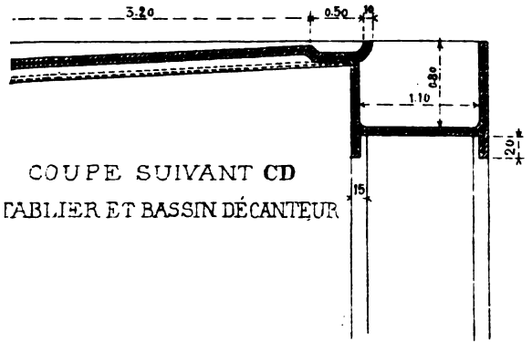



OSSATURE D'UN PILIER

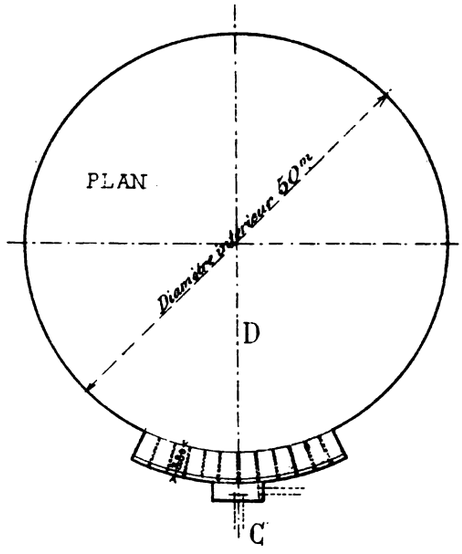
## MAISON
## Vve POMMERY ET Cie A REIMS
### RÉSERVOIR DE 1000 M³.

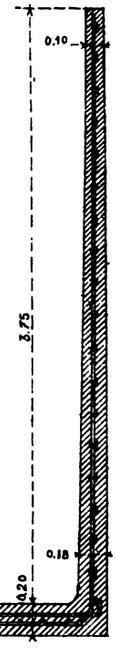



CLOISON SÉPARATIVE DU MILIEU

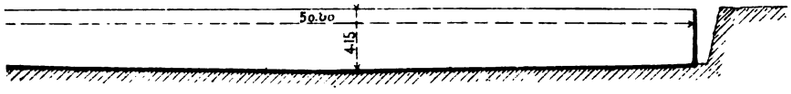



COUPE SUIVANT CD
TABLIER ET BASSIN DÉCANTEUR



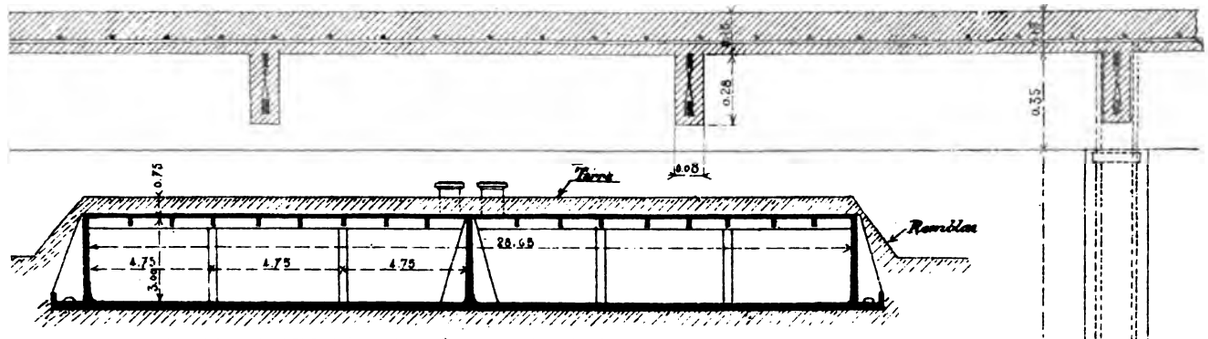




# USINE SAINT, FRÈRES
# A BEAUVAL-SOMME
# RÉSERVOIR DE 7.000M³

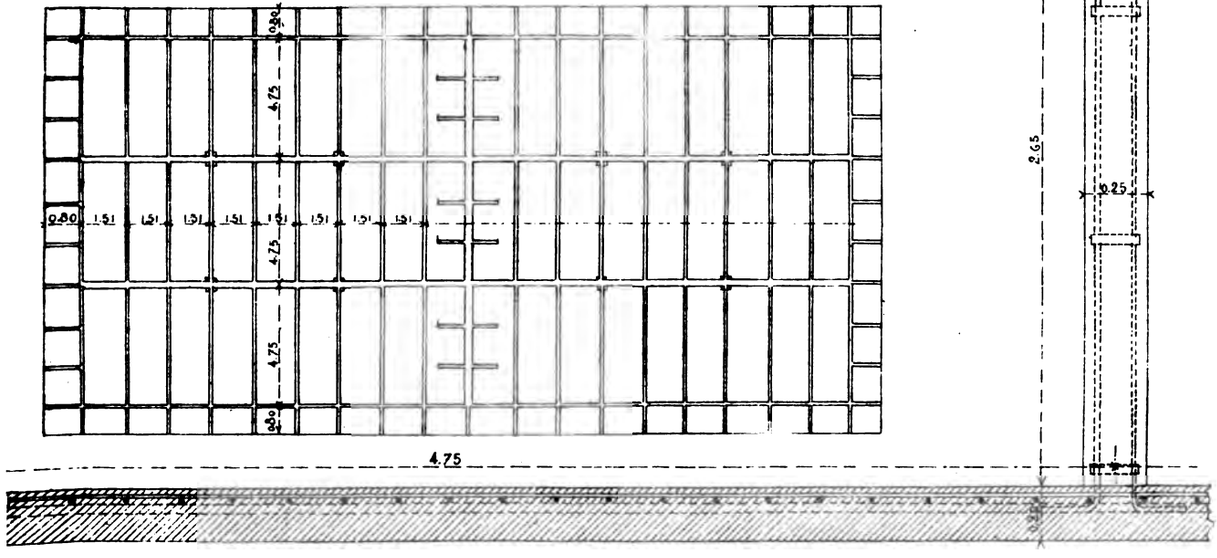



COUPE

COUPE DU RADIER ET DE LA PAROI

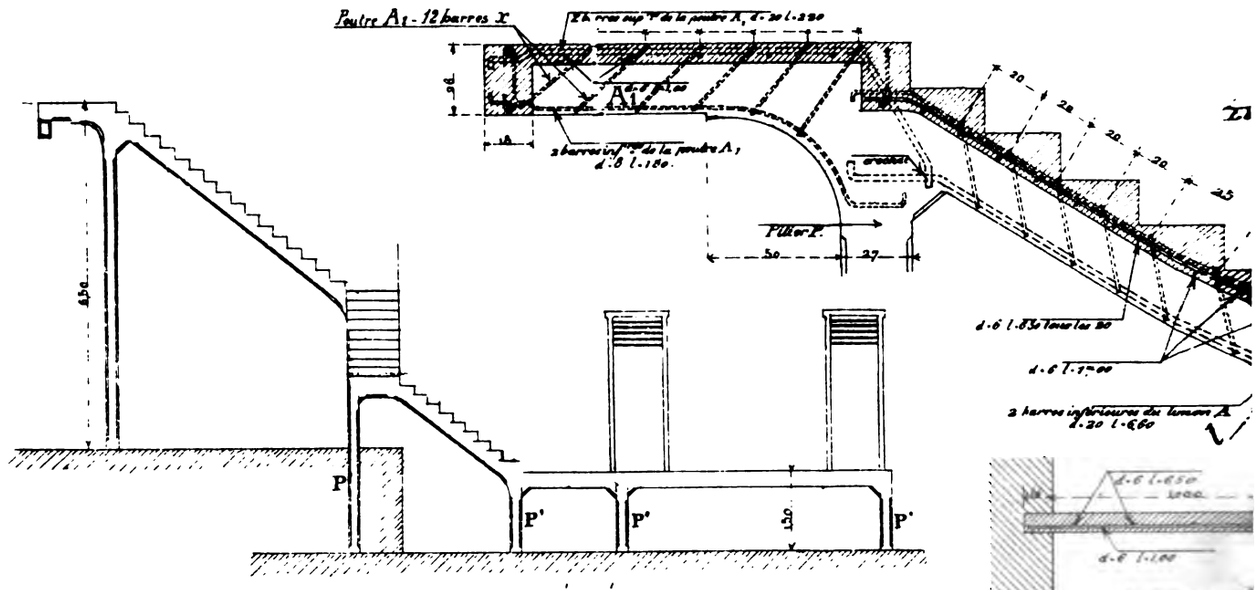



COUPE LONGITUDINALE ET PLAN DE LA POUTRAISON



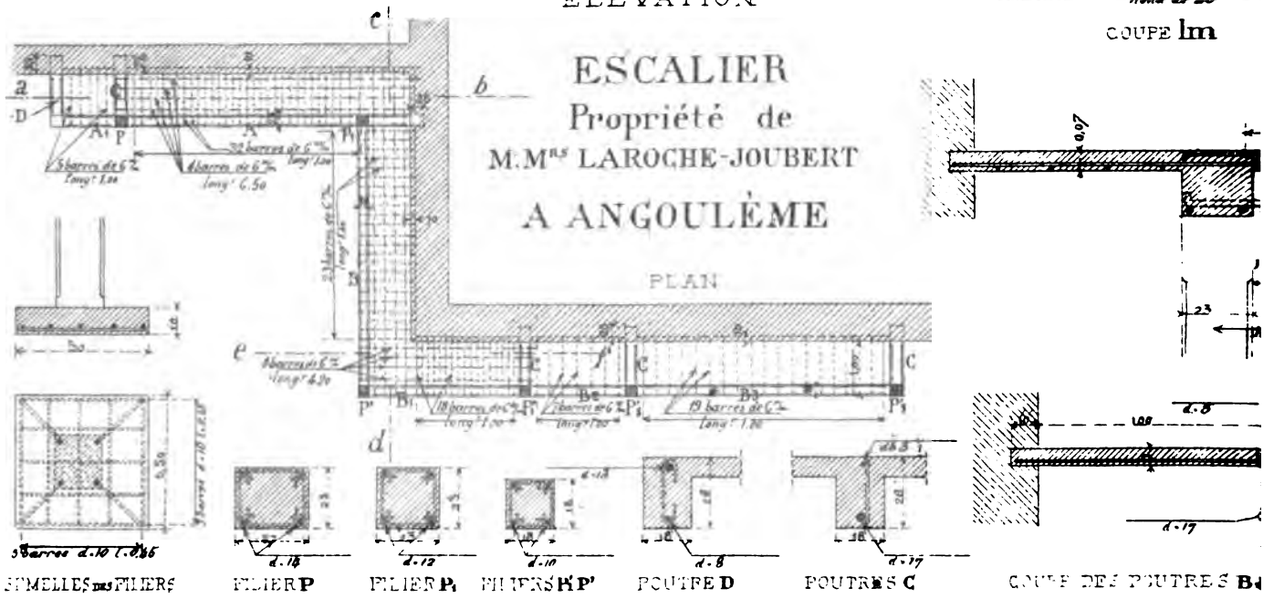

ARMATURE DU RADIER, DES CONTREFORTS ET DU PLANCHER

# ESCALIER-CO

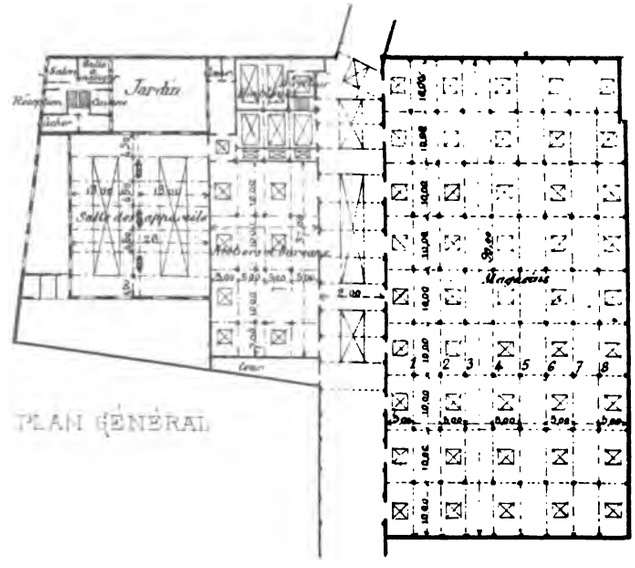



ÉLÉVATION

COUPE lm



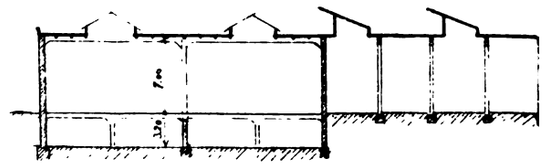

SEMELLES des PILIERS | PILIER P | PILIER P1 | PILIERS H P' | POUTRE D | POUTRES C | COUPE DES POUTRES B



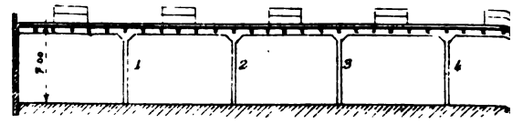

PLAN GÉNÉRAL

## CONDITIONNEM

## ROUBAIX,



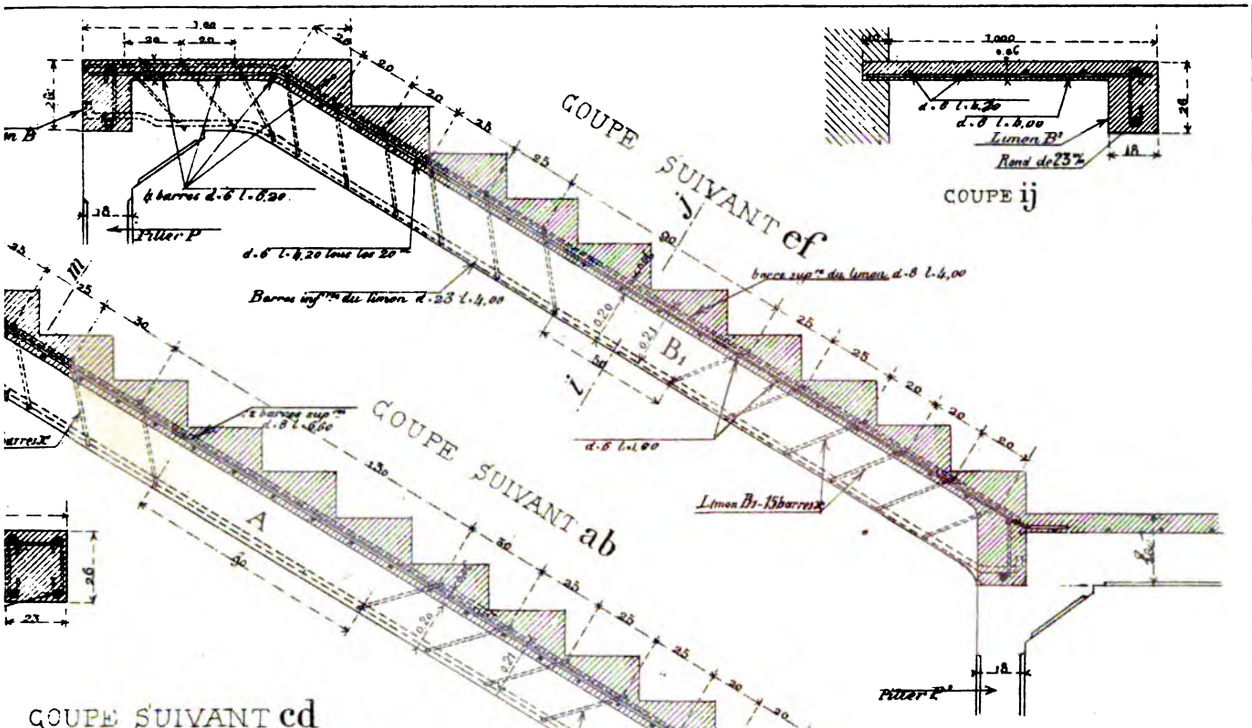
COUPE TRAN

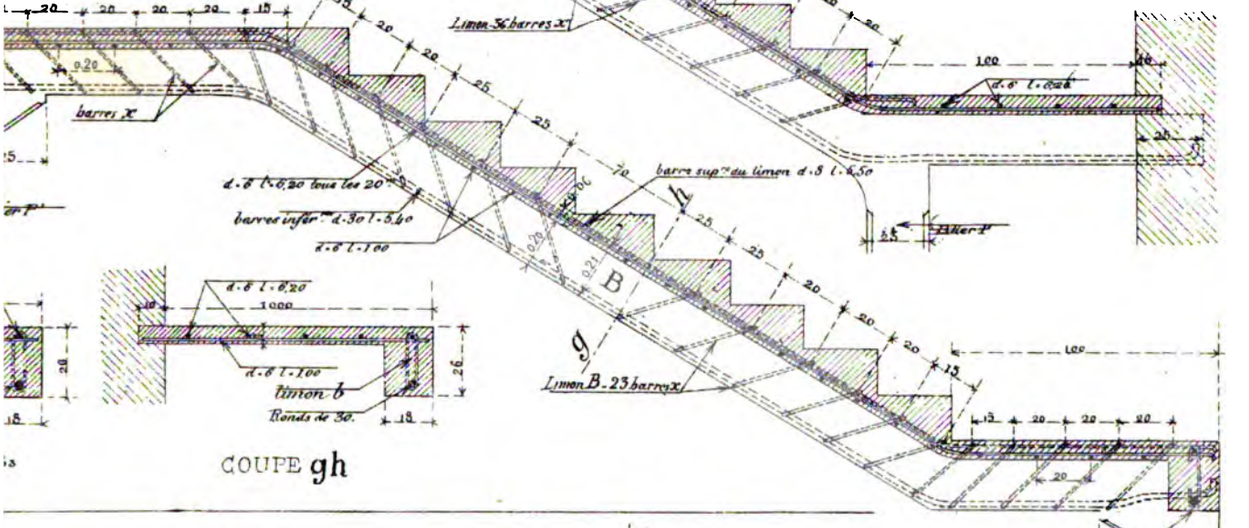



COUPE LONG

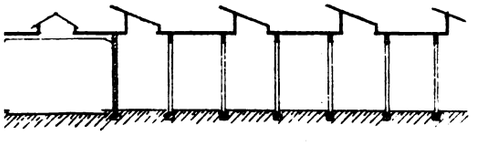
# UVERTURE

*Ingénieur Constructeur :* Mr GOULAROU

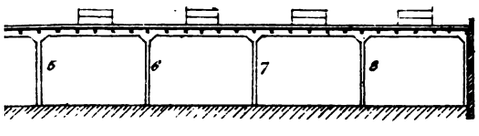



ENT PRIVÉ DE
TOURCOING



VERSALE




TUDINALE

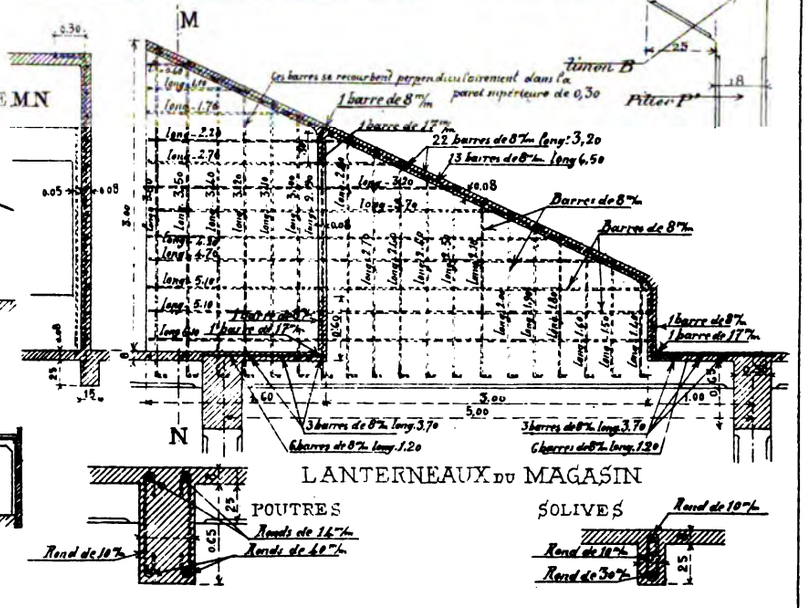
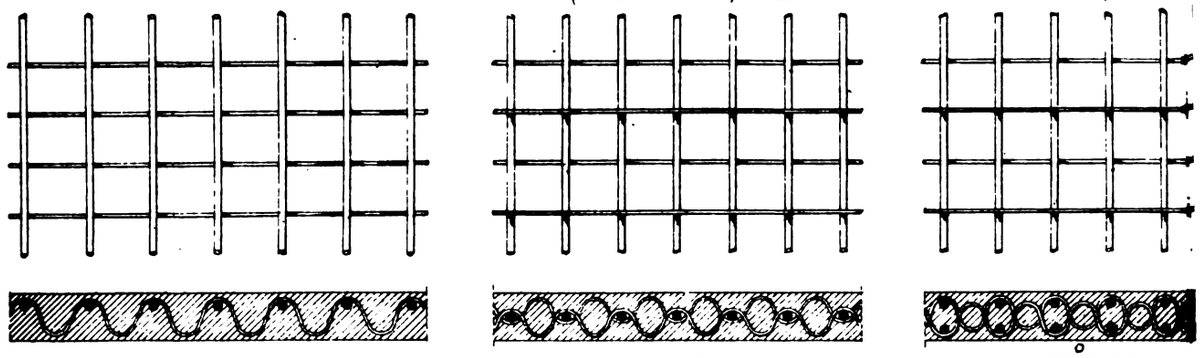


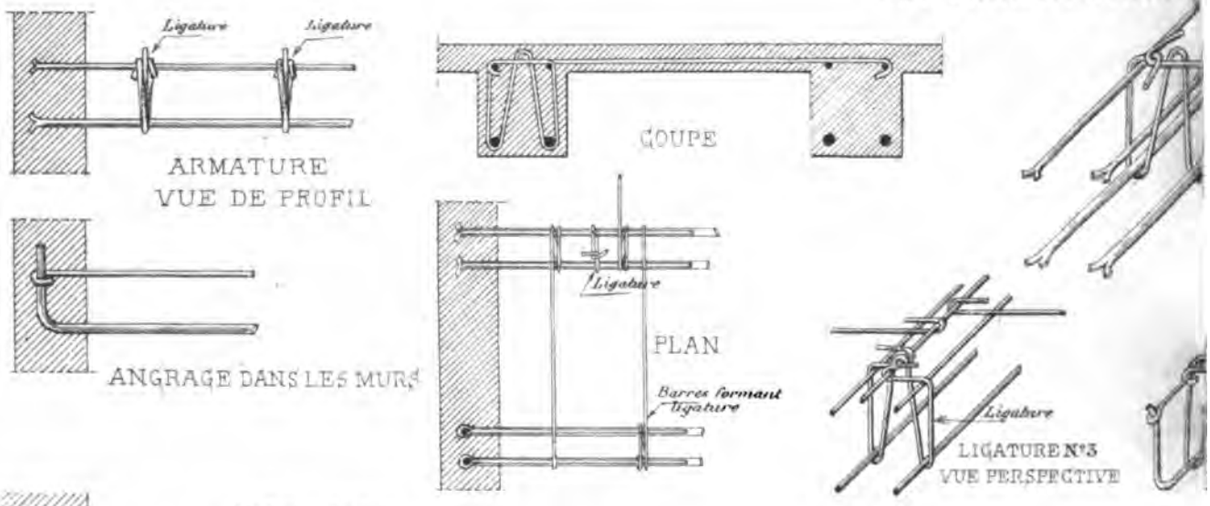

**Planche XLVII**

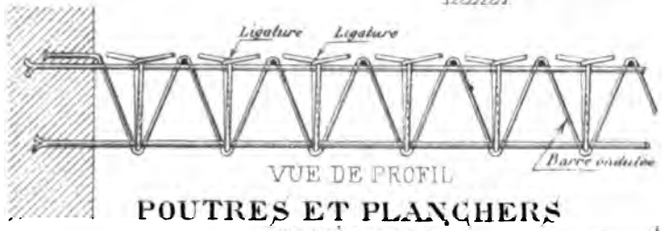
## CLOISONS ET REVÊTEMENTS



TYPE A TYPE B TYPE C

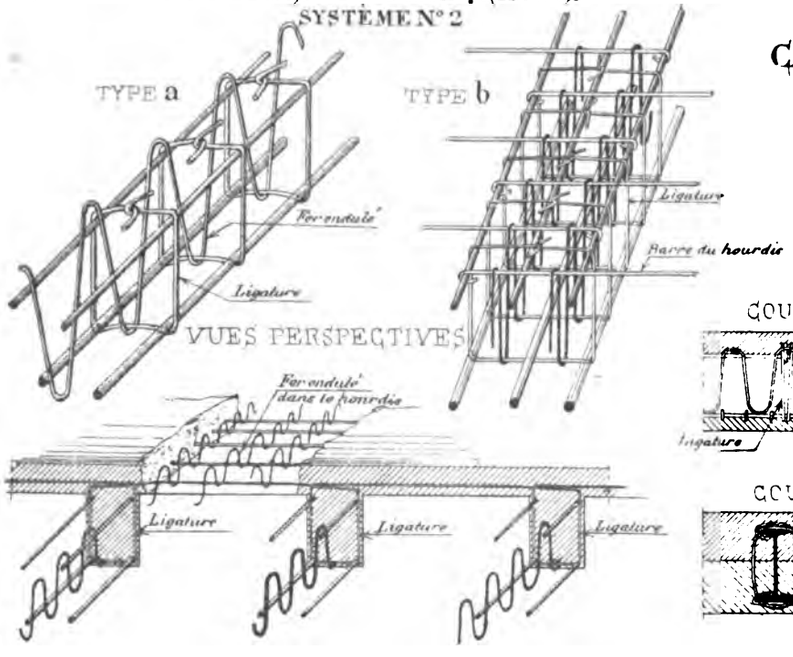
## POUTRES ET PLANC



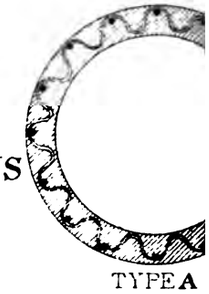




## POUTRES ET PLANCHERS

SYSTÈME N° 2



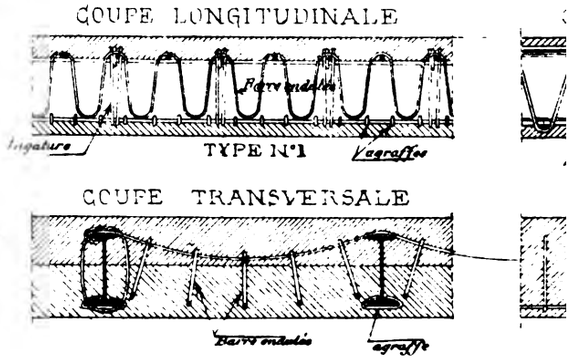

## TUYAUX POUR CANALISATIONS



TYPE A

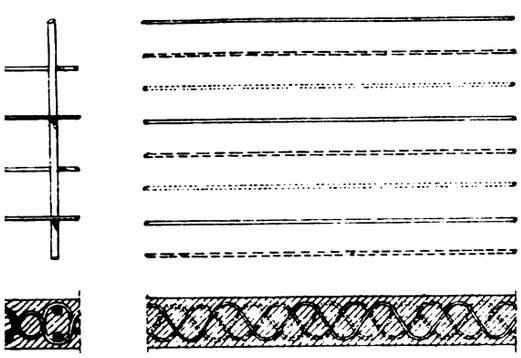
## HOURDIS DE PLA

SUR SOLIVES EN FE

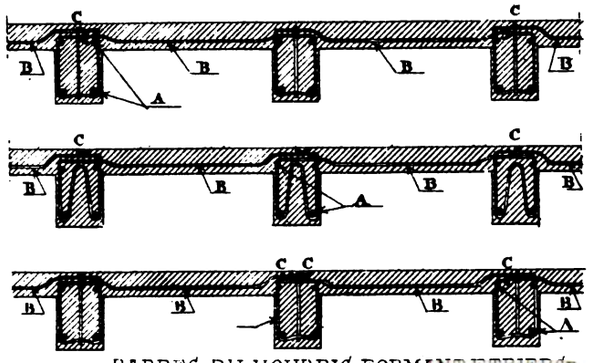


# DIVERS

*Système* DÉGON



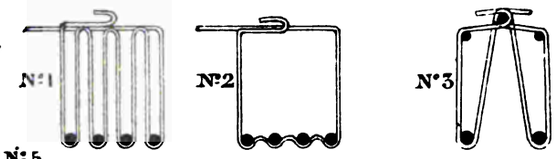
TYPE **D**



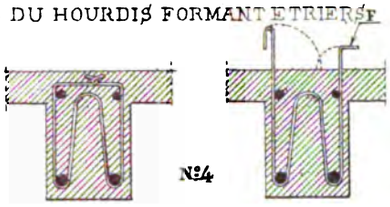

BARRES DU HOURDIS FORMANT ETRIERS

## ERS SYSTÈME N°1

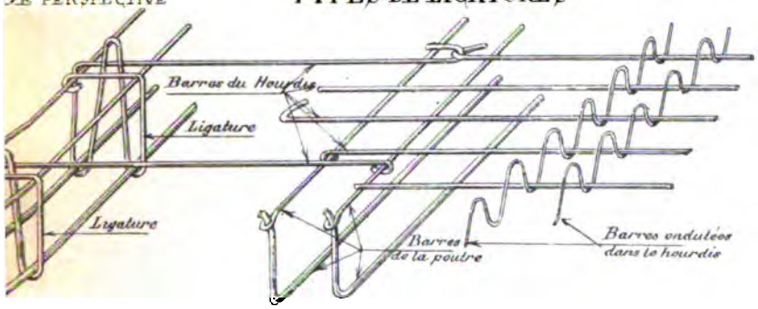
IGATURE N° 5.
UE PERSPECTIVE



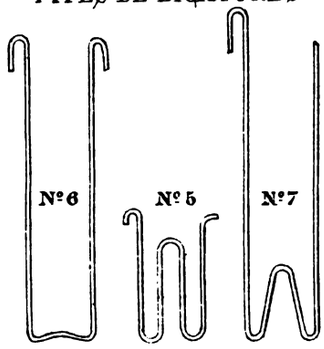

TYPES DE LIGATURES

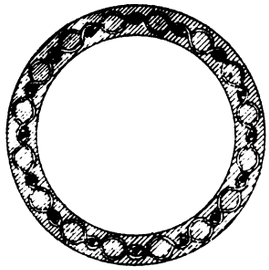



TYPES DE LIGATURES

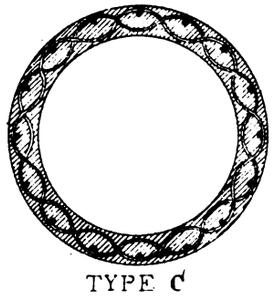



VUE PERSPECTIVE

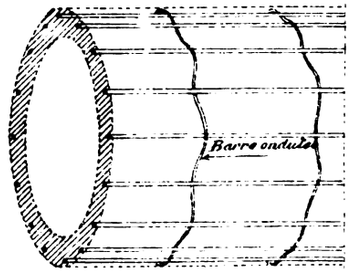




TYPE **B**



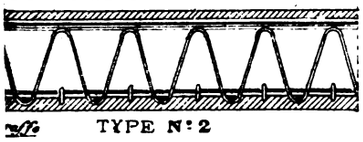
TYPE **C**




VUE DE L'ARMATURE

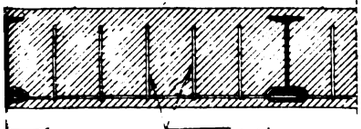
## JCHERS
## ıs

UPE LONGITUDINALE



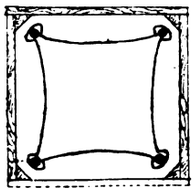
TYPE N° 2

UPE TRANSVERSALE



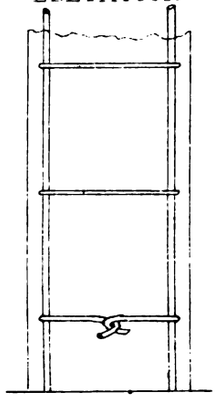

## COLONNES ET PILIERS

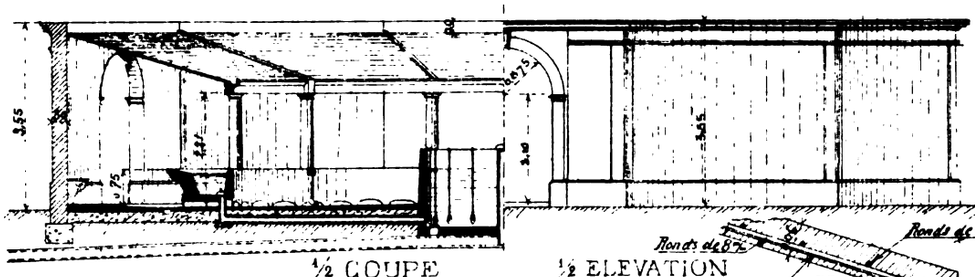
COFFRAGE



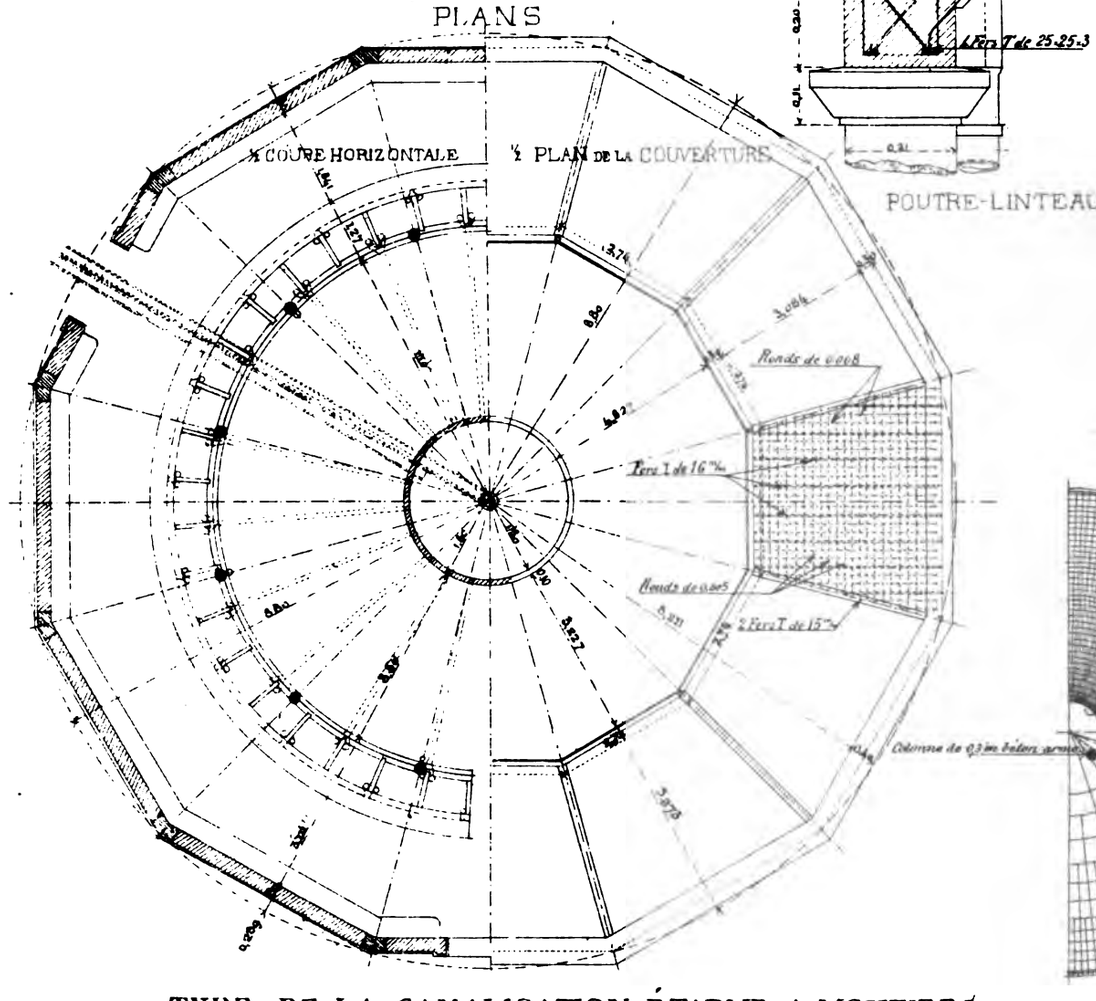
PLANS

ELEVATION

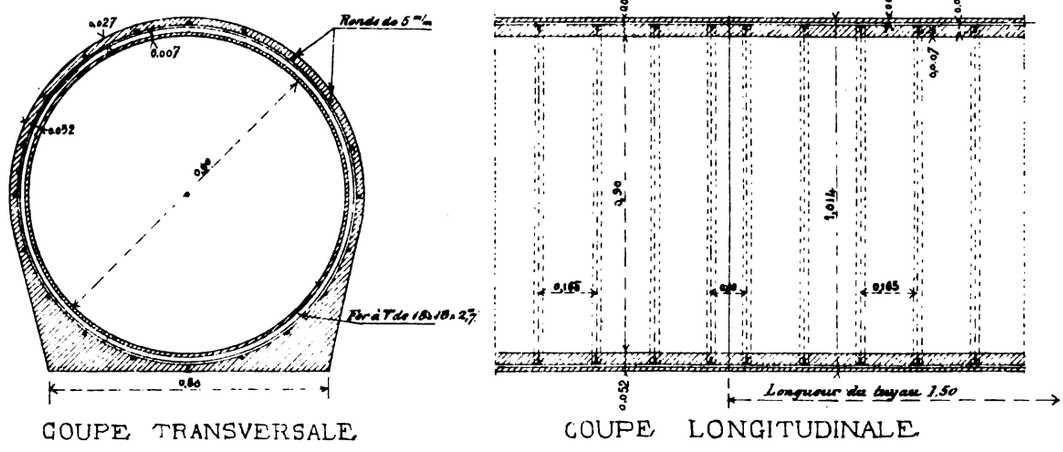





## LAVOIR PUBLIC À GY ~ (Hte SAÔNE.)



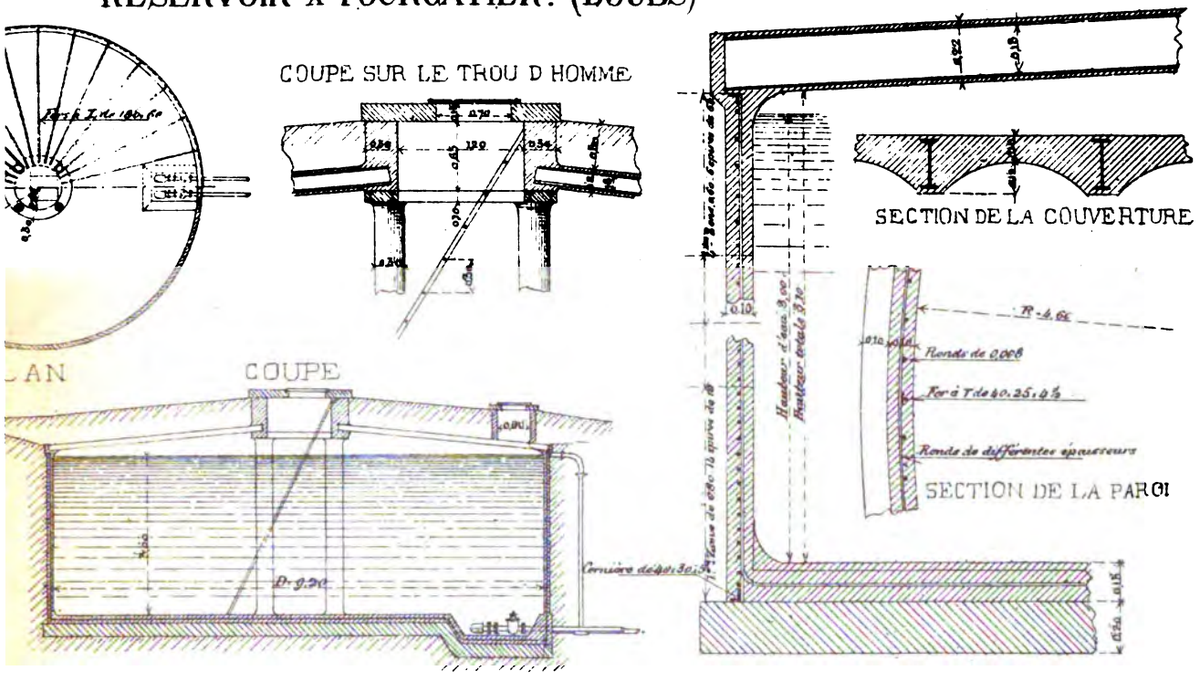

## TYPE DE LA CANALISATION ÉTABLIE A MOUTIERS



# DIVERS

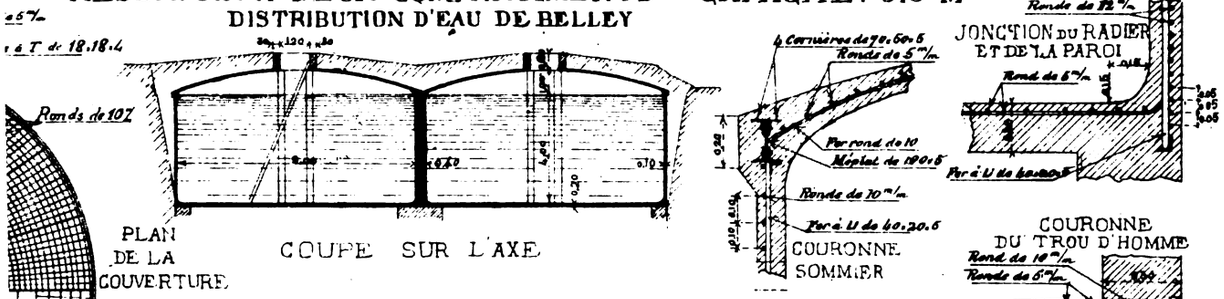
*Constructeur:* Société des Ciments de la Porte de France

## RÉSERVOIR À FOURCATIER. (DOUBS)

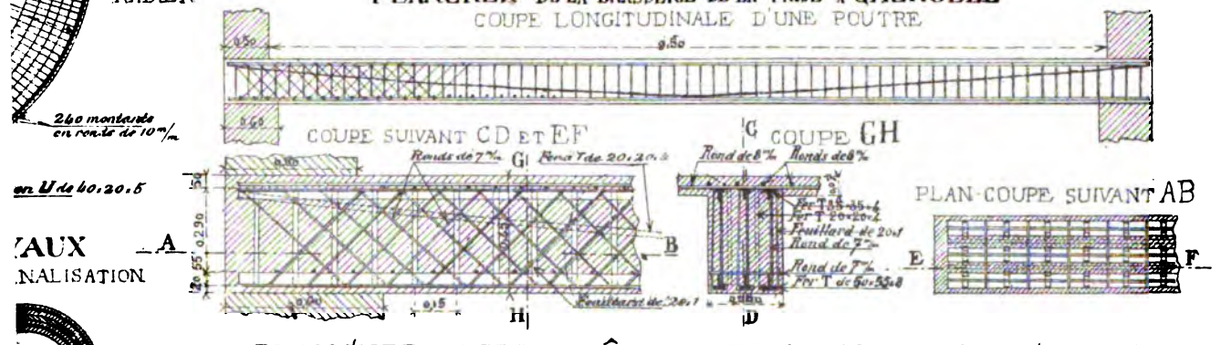



## RÉSERVOIR A DEUX COMPARTIMENTS - CAPACITÉ: 510 M³

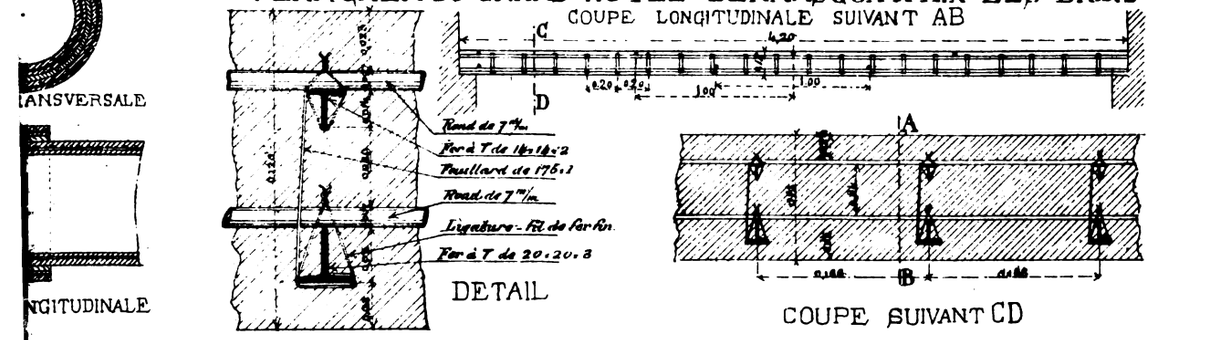
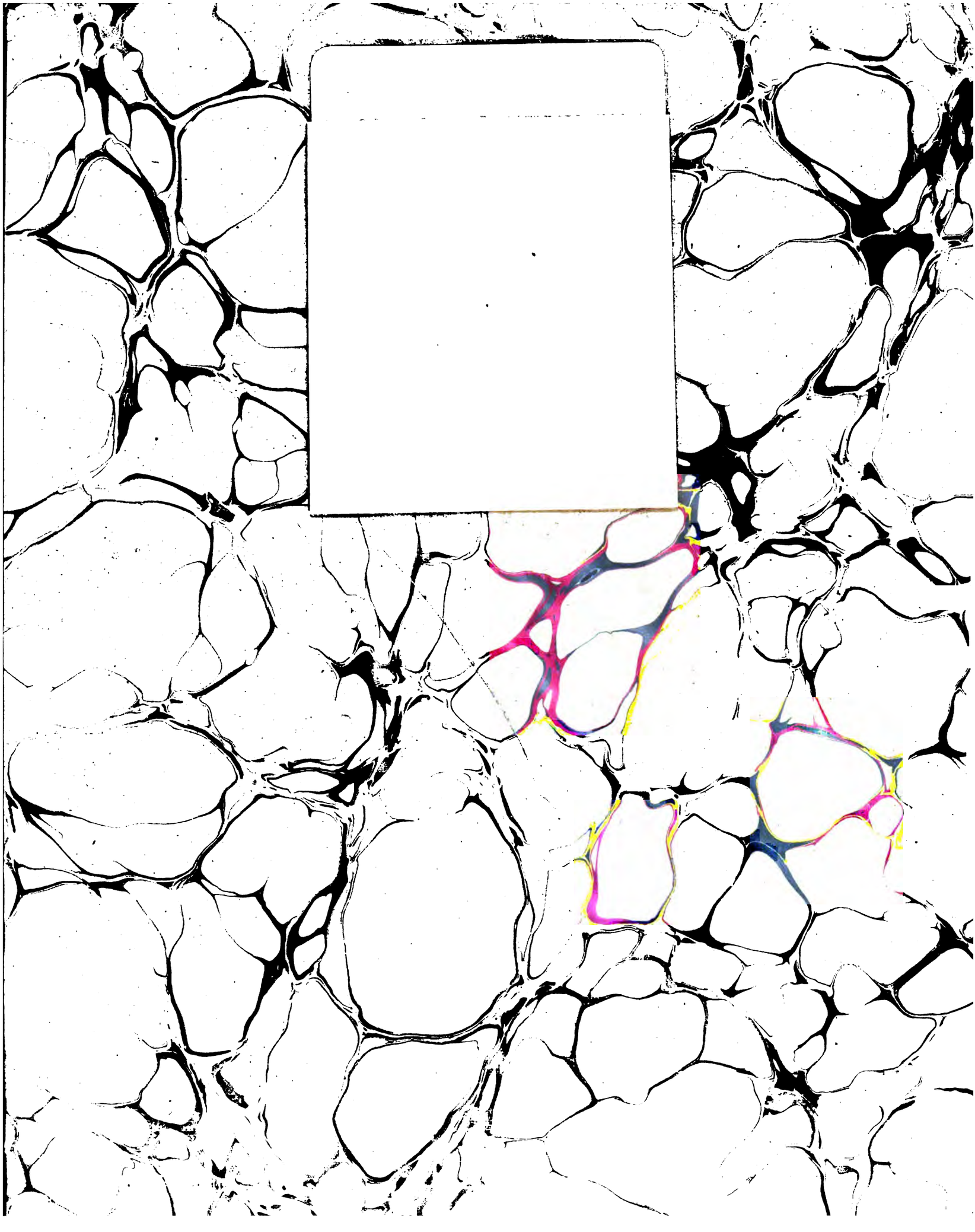
### DISTRIBUTION D'EAU DE BELLEY




## PLANCHER DE LA BRASSERIE DE LA FRISE À GRENOBLE




## PLANCHER DU GRAND HÔTEL BERNASCON A AIX-LES-BAINS



B9080446230
B89080446230A